सूचना प्रविधिमा नेपाली सांस्कृतिक तथा स्थानीय प्रचलनको डेटा पुस्तिका

Nepal's Cultural Convention
For Information Technology
DATA BOOK

All Information Required for Locale & Localization of Software

January, 2005

Nepali Language in Information Technology, Steering Committee
High Level Commission for Information Technology
Singha Durbar, Kathmandu, NEPAL

Foreward By Vice Chairman of HLCIT

Mr. Sharad Chandra Shaha
Vice Chairman
High Level Commission for Information Technology
His Majesty's Government of Nepal

Foreword By Chairman of Steering Committee

Mr. Dambar Bahadur Khadga
Chairman
Nepali Language in Information Technology, Steering Committee
High Level Commission for Information Technology

Preface By Member Secretary of Steering Committee

Allen Bailochan Tuladhar
Member Secretary
Nepali Language in Information Technology, Steering Committee

Contents

Part-1

1.01 Introduction

Main body of this book is Country Data of Cultural Conventions (Part 2), which lists Cultural Conventions (ref. to 1.05). These data are collected and assessed by the AFSIT-SIG on Information Technology Internationalization (AFSIT-SIG on I18N, ref. to 1.03 and Annex H) established in February 1993 under the Asian Forum of Standardization for Information Technology(AFSIT, ref. to 1.02 and Annex F anf G). AFSIT-SIG on I18N is composed of experts from ten countries in the Asian region.

Brief description is given in the Part 1: AFSIT, parent organization of the SIG, mission and activities of the SIG, terminology of Internationalization, concept of cultural conventions, relation with international standards and its activities.

The purpose of this Nepal's Cultural Conventions for Information Technology Data Book is, first, to provide a listing of cultural conventions used in Nepal and to come to an agreement on this from all sectors. This information would be useful for any software developers as a basic requirement for Internationalization (I18N). Third, to provide the data required for the localization of international software so that the cultural conventions as used in Nepal can be represented in the locale of various software and operating systems.

It has been an urgent need for IT Internationalization to collect and cumulate the cultural convention. In Western languages, the cultural convention data has been cumulated substantially by international activities such as the International Standardization Organization (ISO), Center for the International Cooperation for Computerization (CICC) Japan, as well as by information industries and already applied in part to information products and services. However, the Nepali Requirements to Internationalization, itself is a problematic concept and contains quite a few challenges to software developers in terms of Bikram Sambat Calendar, etc. which has not been documented and presented yet in a format that the software developers can understand and use.

The Data Book tries to be a solution to this situation based on the international cooperative work.

Acknowlagements:

Mr. Takayuki Sato

1.02 High Level Commission for Information Technology

High Level Commission for Information Technology (HLCIT) is an apex body formed under the chairmanship of Right Honorable Prime Minister of Nepal with a view to providing crucial strategic direction and helping formulate appropriate policy responses for the development of ICT sector in the country as well as harnessing these technologies to meet key developmental challenges including governance reform and catalyzing economic growth for poverty reduction.

The government of Nepal strongly believes that its efforts in macro-economic and governance reform arena stand to benefit immensely from proper harnessing of recent advances in the technological domain notably, Information and Communication Technologies (ICTs). The fact remains however that the technologies on their own devoid of enabling institutional, policy, and regulatory environment will fall short of producing intended developmental outcomes. This clearly defines the context within which National IT Policy and Strategy of His Majesty's Government of Nepal was announced in the year 2000. These policy provisions lay down a comprehensive framework for the development of IT sector in the country. Among others, the policy envisages the creation of a number of high level institutional entities to provide a direction and leadership for the development of ICT sector in the country.

The key strategic orientation of decades of planned development initiatives of His Majesty's Government of Nepal has revolved around the central theme of poverty reduction. A signatory to Millennium Development Goals (MDGs), the government of Nepal remains committed to socio-economic upliftment of its citizens, within a broad framework of a political dispensation that is based on human rights, democracy and pluralism. Increasingly pronounced emphasis on the role of good governance marked by equity, transparency, accountability and efficiency as well as decentralization and economic liberalization constitute broader strategic framework. Under this framework Nepal has formulated its responses vis-à-vis formidable development challenges the country is facing on a sustained basis.

1.02.01   OBJECTIVES OF HLCIT

The key objective of the commission will be to oversee the implementation of National IT Policy and strategy as well as to provide strategic policy direction and support to the government in concert with its vision to build a knowledge-based society by creating enabling environment for the development and growth of knowledge based institutions and industries. The operational ambit of the Commission will also include playing a key role in formulation of appropriate policy instruments in concert with the dynamism that characterizes the ICT sector and strategies aimed at harnessing information and communication technologies for development, economic growth and poverty reduction.

1.03 Nepali Language in Information Technology, Steering Committee

With the objective to strengthen the research, development, adoption, promotion, usage, training and education of the Nepali language in Information Technology, HLCIT formed the Nepali Language in Information Technology, Steering Committee. Headed by a member of HLCIT and with a Member-Secretary from the Private Sector, the Steering Committee has 16 members in total from the government, public, private, academia as well as various associations and media. In general the Steering Committee shall look after all issues pertaining to strengthening the position of Nepalese language in IT on behalf of HLCIT, including standardization issues (such as character sets, keyboard layouts, fonts, glossary, dictionary etc.); language issues (e.g. sorting order, glyph sets, glossary etc.); conversion issues (e.g. Old document etc.); Interconnectivity issues (e.g. cross platform, DNS, Email etc.); Database issues (e.g. indexing etc.); and Locale issues (e.g. Date, Time, Calendar, Currency, Numbers etc.).

The Steering Committee Membership is shown in Annex H.

1.04 IT internationalization

For broader utilization of information technology, a "Friendly User Interface for any user" is a very essential.

- The friendliness is achieved when:

- Input and Out communication to a system is in user's language in it's character

- The character data is processed in natural rule for (normal way of) the user (e.g. sorting)

- Presentation of cultural conventions (such as date format) becomes natural to the user

The process to adapt a system for target culture is called "localization', "nationalization", "cultural customization" or "internationalization". The process was performed by modifying the original system. This methodology is the easiest approach. However, the method has fundamental problems of "Cost", "Resource requirement", "Release Timing" and "Inter-operability".

- To resolve the problems, ISO/IEC DTR 11017 "Framework for Internationalization" recommends:

- To design a system with "empty containers" for "culturally dependent" data which are explained above

- To fill the container with any "data in target culture"

- The former process to design "culturally empty" system is called "INTERNATIONALIZATION" and

- The later process to fill the "data" in the "empty container" is called "LOCALIZATION" in the DTR.

The INTERNATIONALIZATION/LOCALIZATION model has an advantage of:

- A INTERNATIONALIZed system, in principle, can be LOCALIZED into any selected target culture(s)

- In-depth knowledge of target system is not necessary for LOCALIZATION

- The necessary time for LOCALIZATION is shorter than traditional method

- Time taken to design INTERNATIONALIZed system is not much longer than designing the original system

- Inter-operability between LOCALIZed systems are high

"Internationalization" in this data-book is the "INTERNATIONALIZATION" in ISO/IEC DTR 11017.

remarks: ISO/IEC DTR 11017 is in DTR ballot as of May 1996.

1.05 What is Cultural Convention

This Data Book describes cultural convention data for information technology for AFSIT countries.

Cultural convention is defined as "A convention of an information system which is functionally equivalent between cultures, but may differ in presentation, operation behavior or degree of importance" in ISO/IEC DTR 11017 "Framework for internationalization".

There are too many items to list all the culturally dependent items in Information Technology (IT).

For example, there are so many Taboo Items in each culture; it is very difficult to select which taboo item to include in this Data Book or which should not.

Rule of thumb to decide for inclusion is as follows:

Assume sales process of system. If customer says that principle of system is acceptable, but can not place an order due to the user-interface, saying that "because presentation in our custom is different". And if the custom is not "organizational and/or custom of profession", then it must be a cultural convention that should be described in this Data Book. In this sense, there are almost no cultural conventions out from Taboo even there are many taboo items in general sense.

1.05.1 Selection of Cultural Convention

As technology progresses and/or customer demand evolves, variety of cultural conventions to be supported by information system will be broader. The broader the application, the more cultural conventions to be supported. We are shooting moving target. Thus, it is very difficult to define single fixed set of cultural conventions for IT application to be relevant forever.

Therefore, in this Data Book, items for inclusion are selected more than what are supported in current information technology. Rather, this Data Book describes cultural conventions not only those needed today but also is including what may (may not) be supported in a systems in future. Thus, it is not necessary for a user of this Data Book to support all cultural conventions described in this Data Book.

However, it is necessary to list as many cultural conventions as possible in this Data Book, such that the "empty container" for future additional cultural conventions are of the "right size and right shape".

1.05.2 Description format of cultural convention

Cultural convention data in this Data Book are in descriptive text.

For real use of cultural data in information systems, it is necessary that the cultural convention data should be in machine readable form and in a mutually agreed format.

Since the format is not specified yet, for the purpose of utilization of data in real information systems, it is necessary to convert the data in this Data Book to machine readable form and in a mutually agreed data exchange format.

1.06 Relation with International Standards and its activities

ISO/IEC JTC1 SC22 (Program Language) WG20 (Internationalization) is the related international standardization activity.

A technical report (TR) "ISO/IEC TR 11017 Framework for internationalization" is in development process (at DTR as of Jan. 96).

The TR needs to describe all necessary cultural conventions. Feedback for Asian cultural conventions was taken cared from the SIG via Japanese national body, and also cultural conventions required for other region were carried to the SIG via Japanese expert in the WG20.

Consistency is maintained between the TR and this Data Book through the informal and invisible communication channel.

This is the first contribution that the SIG was made for the international standards

As per INTERNATIONALIZATION/LOCALIZATION principle, data of the cultural conventions is not always necessarily standardized. Any data to be filled into the "empty container", and whatever the data filled, the meaning of the data should be same regardless of the representation.

Besides, the "empty container" should be "right size and right shape'. The size and shape (method to specify the data in system) of the container should be standardized clearly enough.

A project for "Cultural convention specification method" has opened at the WG20. Cultural convention data in this Data Book should be taken in to account in the specification.

Again the WG20 members in AFSIT member countries will feedback the data for the project such that the "container size and shape" does fit to any of Asian requirements.

This will be the second contribution from the SIG activity for the international standard.

Even though cultural convention data themselves are not necessarily standardized in theory, it can be used as a base of National Profile, Default data for the country etc., when it is necessary to define this data.

(If needed, those profiles to be registered for open public use)

This "base for profiling" to be the third contribution of the SIG activities.

Still there are many countries, regions or minority groups where cultural convention data are not clear outside of the group (or even within the group sometimes). For those groups, this Data Book will be good template for reference to provide their cultural convention data opened.

This will be fourth contribution of this Data Book.

Part 2   Country Data of Cultural Conventions

This part describes detailed data of cultural conventions of AFSIT member countries.

Usually, the data are NOT mandatory; rather it is majority of the region. Thus other convention data can be also used in the region (as alternative, by chance and/or by application field)

"How to read PART-2?"

Country (or Region) is in Alphabetical order of daily/simplified (not full formal) use name in English

Some of the data are expressed by using devanagari character(s) in the Unicode format following the Character code(s) of ISO/IEC 10646.

Symbols:

■ ： used in place where local character(s) are not provided at the time of publication of this Data Book.

n/a： not applicable or not available

note-x: additional information for the data/description designated by same "note-x" in the same section or   sub-section

rem-x：additional information for the section or sub-section

2.01   Date

Date expressions vary from country to country.

There are those main differences:

     a. Format difference

     b. Whether using era system or not

     c. Month and Week of day in local language

2.01.1   Format   (DATE)

There are two elements for Date Format, one is sequence of data and another is data separator.

Data Sequence: There are 3 kinds of date formats:

     Type-1 : ddmmyy   (Day, Month, Year)

     Type-2 : yymmdd   (Year, Month, Day)

     Type-3 : mmddyy   (Month, Day, Year)

Data Separator: There are 4 kinds of data separator:

     Type-1: Space as data separator   (eg yy mm dd)

     Type-2: Dash as data separator   (eg yy-mm-dd)

     Type-3: Slash as data separator   (eg yy/mm/dd)

     Type-4: Period as data separator   (eg yy. mm. dd)

     Type-5:Devanagari period separator (eg yy|mm|dd)

		Sequence	separator
Nepal (for Gregorian Calendar)	NEP	2	3 note-1
Nepal (for Bikram Sambat Calendar)	NEP	2	3
Nepal (for Nepal Sambat Calendar)	NEP	2	3
Nepal (for lunar calendar)	NEP	2	3

note-1:   The primary calendar of Nepal is the Bikram Sambat which is used for all day to day government and civil functioning. The Gregorian calendar is used as a second option. In this case for the Bikram Sambat calendar, the primary data sequence is Type-2. Type-1 and Type-3 Data Sequence is not used. Bikram Sambat calendar starts approximately in mid April and is approx 57 years ahead of the Gregorian Calendar, eg. 2004 AD is equivalent to 2061/62 BS.

2.01.2   *Era system*   *(DATE)*

Some countries are using Era system as well as (or instead of) the popular AD system.

The era system are:

Type -M: (mandatory) for formal expression, or

Type -P: (strong preference), or

Type -O   (optional), or

Type -R: (rare use).

Nepal	NEP	Bimram Sambat calendar	M	note-1
		Lunar Calendar	O	
		Nepal Sambat calendar	O	

note-1:   The primary calendar of Nepal is the Bikram Sambat which is used for all day to day government and civil functioning. The Gregorian calendar is used as a second option. In this case for the Bikram Sambat calendar, the primary data sequence is Type-2. Bikram Sambat calendar starts approximately in mid April and is approx 57 years ahead of the Gregorian Calendar, eg. 2004 AD is equivalent to 2061/62 BS.

The lunar calendar is also used for all religious functions and auspicious occasions as well, as an optional calendar.

2.01.3   *Name of month (in local language)*   *(DATE)*

2.01.3.1 *Full name in local expression*   *(name of month)*

January	जनवरी
February	फेब्रुअरी
March	मार्च
April	अप्रिल
May	मे
June	जुन
July	जुलाई
August	अगस्त (अगष्ट)

September	सेप्टेम्बर
October	अक्टोबर
November	नोभेम्बर
December	डिसेम्बर

Rem-1: Bikram Sambat calendar System

1st month	Baisakh	वैशाख	वैशाख
	Jestha	जेष्ठ	जेठ
	Asadh	आषाढ	असार
	Shrawan	श्रावण	साउन
	Bhadra	भाद्र	भदौ
	Aswin	आश्विन	असोज
	Kartik	कार्तिक	कात्तिक
	Mangsir	मार्ग	मङ्सिर
	Poush	पौष	पुस
	Magh	माघ	माघ
	Falgun	फाल्गुन	फागुन
	Chaitra	चैत्र	चैत

2.01.3.2 Short name in local expression   *(name of month)*

	NEP	
January	JAN	जन
February	FEB	फेब्रु
March	MAR	मार्च
April	APR	अप्रि
May	MAY	मे
June	JUN	जून
July	JUL	जुल
August	AUG	अग
September	SEP	सेप्टे
October	OCT	अक्टो
November	NOV	नोभे
December	DEC	डिसे

2.01.4   Name of day of week in local language   (DATE)

2.01.4.1 Full local expression   (day of week)

	Nepali
	Nepali
Sunday	आइतवार
Monday	सोमवार
Tuesday	मङ्गलवार
Wednesday	बुधवार
Thursday	बिहीवार
Friday	शुक्रवार
Saturday	शनिवार

Note: Sunday in Nepali has originally been referred to the Sun and has originated from आदित्यवार. Thursday has been originated from Jupiter in the solar system and has originated from the word बृहस्पतिवार.   Similarly Saturday has originated from Saturn in the solar system has originated from the word शनैश्चरवार।

remarks: ISO 8601 defines day of week numbering

2.01.4.2 Short form local expression   (day of week)

	USA	NEP
Sunday	SUN	आइत
Monday	MON	सोम
Tuesday	TUE	मङ्गल
Wednesday	WED	बुध
Thursday	THU	बिही
Friday	FRI	शुक्र
Saturday	SAT	शनि

2.01.4.3   Format   (day of week)

The location of the day of the week when writing date is culturally dependent.
In some cultures, the written format is different from the spoken one.

Type-1: Before the date
Type-2: After the date
Type-A: Sunday is the first day of a week
Type-B: Monday is the first day of a week

	In Local character	In phonetic	First day
	(Writing)	(Speaking)	

NEPAL	NEP	2	2	A

2.01.5   *Week numbering*   *(DATE)*

There are three different ways of numbering the weeks

> Type-1: Week 1 is the week including January 1st.
> Type-2: Week 1 is the week starting first Sunday of the year
> Type-3: Other than 1 and 2 (if any specify)

Nepal   NEP   n/a   No official week numbering is used

2.02   Time

Expression of time differs from culture to culture.

The elements of the difference are:
    a. System (12 or 24 hours as a unit)
    b. Hour, Minutes, Second separator
    c. Time zone and applicability of daylight saving system

2.02.1   *Time format*   *(TIME)*

There are 2 kinds of time formats:

Type-1: 24 hour system
Type-2: 12 hour system   In case of 12 hour system, am/pm annotation is usually required

Standard format

		type(s)	Location of am/pm	Time separator
Nepal	NEP	1,2	5:45 am	Colon(:)

rem-1: Related standards: ISO 8601, GB/T 7408, JIS X 302, PNS 293, TIS 1111

Local format

		type	Location of am/pm and Time separator	
Nepal	NEP	1	५:४५ ए एम	५:४५ पि एम
			पूर्व मध्याह्न	उत्तर मध्याह्न

Nepal has a system of dividing the day in 4 stages of where the timing changes are not very clear and is more descriptive of the daylight and evenings.

प्रभात   बिहान

दिवा   दिउँसो

संध्या   बेलुका

रात्रि   राति

2.02.2   *Time zone and day-light saving time*   *(TIME)*

Besides the difference in format, the expression of time ranges from country to country.

Time zone system;
Time difference from GMT
Day light saving time (from/to when)

		Time zone	difference from GMT	Day light saving
Nepal	NEP	NST	+5:45	n/a

Note: From the year 2040BS, the time zone has been converted from +5:40GMT to +5:45 GMT.

2.03 Calendar

Even though Gregorian calendar also known as the English calendar, modern calendar, western calendar, is also being adopted by many people in the private sector, the Bikram Sambat calendar is still the official calendar used for government and civil works. The Lunar calendar is used for customary ceremonies or religious purposes.

Type -1: Gregorian calendar
Type -2: Lunar Calendar
Type -3: Islamic Calendar
Type -4: Bikram Sambat Calendar
Type-5: Nepal Sambat Calendar
Type-6: Saka Era Calendar

		Official Calendar	Other Calendar
Nepal	NEP	4	1, 2, 5, 6

2.03.1 National Holidays

Nepal follows two national holiday sets. One by the government and one by Nepal Rastra Bank for all commercial purposes. The dates are based on the calendar for 2061 Bikram Sambat (2004/05 AD). The holiday list is published annually and the dates change accordingly. The following list identifies both of them:

<ADD LUNAR CALENDAR IN TO THE DATES>

Baisakh 1	New Year's Day	based on BS Calendar	
Baisakh 22	Buddha Jayanti	based on Lunar Calendar	
Asadh 23	His Majesty's Birthday	based on BS Calendar	
Bhadra 14	Janai Purnima	based on Lunar Calendar	
Bhadra 21	Krishnastami	based on Lunar Calendar	
Aswin 1	Teej	based on Lunar Calendar	Holiday for females only
Aswin 3	Rishi Panchami	based on Lunar Calendar	Holiday for females only
Aswin 11	Indrajatra	based on Lunar Calendar	Holiday for Kathmandu Valley only
Kartik 4	Phulpati – Dashain	based on Lunar Calendar	
Kartik 5	Mahastami – Dashami	based on Lunar Calendar	
Kartik 6	Mahanawami – Dashain	based on Lunar Calendar	
Kartik 7	Vijaya Dashami	based on Lunar Calendar	
Kartik 8	Ekadashi – Dashain	based on Lunar Calendar	
Kartik 9	Duwadasi – Dashain	based on Lunar Calendar	
Kartik 23	Constitution Day	based on BS Calendar	
Kartik 27	Laxmi Puja – Tihar	based on Lunar Calendar	
Kartik 28	Gobardhan Puja – Tihar	based on Lunar Calendar	
Kartik 29	Bhai Tika – Tihar	based on Lunar Calendar	
Mangsir 3	Chat Parwa	based on Lunar Calendar	Holiday for Terai Region only
Poush 27	Prithiwi Jayanti National Unity Day	based on BS Calendar	
Falgun 7	Democracy Day	based on BS Calendar	
Falgun 25	Shivaratri	based on Lunar Calendar	
Chaitra 12	Fagu Purnima	based on Lunar Calendar	Holiday for Hilly Regions
Chaitra 13	Fagu Purnima	based on Lunar Calendar	Holiday for Terai Regions

2.04   Number format

The format to express number has three elements

a. Location of the digit separator (normally called thousands separator) location
b. Symbols used for the digit separations and decimal point.
c. Positive/Negative number sign

For location of digit separator, each 3-digits (thousand) is the most popular way, but there are also other cases.
Note that even if 3-digits is popular in Arabic numbers, it might be different when number is expressed and written or spoken in local language, (for details refer to Word expression of number)

For symbols, there are two popular cases, but there are also other exceptional symbols used.

Type -1:   12,345,678.901 , (comma) for digits separator, and . (period)for decimal
Type -2:   12.345.678,901 . (period) for digit separator, and , (comma) for decimal point

		Digit separator	Symbol
Nepal	NEP	3 (2) digits	1 note-2 separator for each 2 digits are needed

note-1:   2 digits system: 12, 34, 567.89 separator is needed for each 2 digit for beyond 1000.

		Positive	Negative sign	Location
Nepal	NEP	no sign or +	-(minus)	beginning

2.05   Number Rounding

Four number rounding methods have been identified for inclusion in this Data Book.

<TAKE THE NS STANDARDS FROM GUPTA JEE, NBSM>

Type-1:   The higher integral multiple is selected as rounded number

      nnn.0   through nnn.4 round to nnn   eg 123.4 --> 123

      nnn.5   through nnn.9 round to nn(n+1)   eg 123.5 --> 124

      nnn.nn0 through nnn.nn4 round to nnn.nn   eg 123.454 --> 123.45

      nnn.nn5 through nnn.nn9 round to nnn.n(n+1)   eg 123.455 --> 123.46

(ISO 31-0:1992 Annex B B.3 rule B)

Type-2:   The even integral multiple is selected as the rounded number

      eg 123.45 --> 123.4

      eg 123.55 --> 123.6

(ISO 31-0:1992 Annex B B.3 rule A)

Type-3:   nnn.nn1 and nnn.nn2   round to nnn.nn0 eg 123.452 --> 123.450

      nn.nn3 through nnn.nn7 round to nnn.nn5 eg 123.454 --> 123.455

      nnn.nn8 and nnn.nn9 round to nnn.n(n+1)0 eg 123.458 --> 123.460

Type-4:   nn.(n-1)76 through nn.n25 round to nn.n0 eg 123.325 --> 123.30

      nn.n26 through nn.n75 round to nn.n5   eg 123.326 --> 123.35

      eg 123.376 --> 123.40

Nepal   NEP   1

Remarks: Related standards: ISO 30-0, IS 2, JIS Z 8401, KS A 0021

2.06 Monetary Amount Expression

Expression of monetary amount has two basic elements:

1: a. Currency sign

b. Currency amount format

c. Amount (number) expression.

2: a: Currency sign to be defined for Local character, Latin (or Latin like) character and International. And also placement (before, middle and end of number) are different.

b: Currency amount format might different between cultures

c: Amount expression normally follows number format of the country (with exception) and word representation of number of the culture.

2.06.1 Currency sign   *(MONETARY)*

Typically, there are three or more kind of currency signs that are used for the same currency.

One is currency sign in local character (which is usually a base and legally correct currency sign).

Second one is currency symbol (like $ sign) for easy use. This sign usually is in Latin character like design.

Third one is International use to avoid ambiguity between similar currency name and sign.

		in Local ch.	in Latin ch.	International
Nepal	NEP	रु (0930, 0941)	Rs	NPR 12,345.67
Nepal	NEP		(Nepalese) Rupee	Re 1 = 100 paisa
				Rs 2 = 200 paisa

2.06.2 Format   *(MONETARY)*

Currency amount format differences are already expressed as a part of currency sign placement.

2.06.3 Amount expression in word   *(MONETARY)*

For legal purpose, most countries have a custom to write the monetary amount in words.

Monetary amount expression in spoken language is another cultural dependent item.

Both of the above can be categorized into two types:

Type -B: Currency word (sign, unit) at the beginning (before number)

Type -E: Currency word (sign, unit) at the end (after number)

		Writing in local character	Pronounce in local language
Nepal	NEP	E	E

Remarks: Related standards: ISO 4217, GB 12408

2.07 Word Representation of Numbers

Sometimes numbers are expressed in word form.

For example, formal expression of monetary amount requires a word representation form in most cases.

Please note that in the case of word representation, placement of a digit separator equivalent (word) may be different from Arabic number. (from each 3 digits to 4 digits in CNA)

		digit form	written form
0	zero	०	शून्य
1	one	१	एक
2	two	२	दुई
3	three	३	तीन
4	four	४	चार
5	five	५	पाँच
6	six	६	छ
7	seven	७	सात
8	eight	८	आठ
9	nine	९	नौ
10	ten	१०	दश
11	eleven	११	एघार
1x	--teen	n/a	no teen counting in Nepali language
100	hundred	१००	एक सय
1000(K)	thousand	१,०००	एक हजार
10K	ten thousand	१०,०००	दश हजार
100K	hundred thousand	१,००,०००	एक लाख
1000K(M)	million	१०,००,०००	दश लाख
10M	ten million	१,००,००,०००	एक करोड

100M	hundred million	१०,००,००,०००	दश करोड
1000M(B)	billion	१,००,००,००,०००	एक अरब
10B	ten billion	१०,००,००,००,०००	दश अरब
100B	hundred billion	१,००,००,००,००,०००	एक खरब
1000B(T)	trillion	१०,००,००,००,००,०००	दश खरब
10T	ten trillion	१,००,००,००,००,००,०००	एक नील
100T	hundred trillion	१०,००,००,००,००,००,०००	दस नील
		१,००,००,००,००,००,००,०००	एक पद्म
		१०,००,००,००,००,००,००,०००	दश पद्म
		१,००,००,००,००,००,००,००,०००	एक शङ्ख
		१०,००,००,००,००,००,००,००,०००	दश शङ्ख
		१,००,००,००,००,००,००,००,००,०००	महाशङ्ख
.	point	दशमलव	बिन्दु

Remarks: Related standards are ISO 6093, MS ISO 6093

2.08   Hyphenation of word

Hyphenation rule is different for script and writing system.

Nepal   NEP   The international practice of using phonetic units as boundaries for
                            hyphenation is applied.

2.09   ICON and Symbols

Requirements about ICON have to be separated into two.

One is whether if there are any special (prohibited to use in particular) symbols or not for IT application and/or within normal ICONS. Another is applicability of international guidance in ISO 3864

	Special Requirements	ISO 3864 applicability

Nepal   NEP   n/a

Remarks: Related standards are ICS 01.080.XX, ISO 2047, ISO 3864, ISO 7001, GB 2894, GB/T10001, JIS X 0209, JIS Z 9101, JIS Z 9104, KS C 5713, PNS 1082, PNS 1083, PNS 3864

2.09.1 Check Marks   (ICON and SYMBOLS)

Style of check marks are culturally dependent. Some times it could cause unnecessary misunderstanding.

For example, X mark in a list means NOT AVAILABLE (or negative tone) in Japan and normally ○ is used for AVAILABLE (or yes)

Nepal   NEP   ✓(2713 check mark): right or available, yes or positive meaning

X ：wrong or not available, no or negative meaning

?: Doubtful or not clear

2.10   Writing Direction

Writing direction of the text is script (thus cultural) dependent

There are four different cases of writing direction available.

Type-1: Horizontal writing	From left to right, and from top to bottom
Type-2: Horizontal writing	From right to left, and from top to bottom
Type-3: Horizontal writing	Bi-directional horizontal (script dependent direction) and from top to bottom. Writing direction for a script may be country dependent even if it is a same script
Type-4: Vertical writing	From top to bottom, and right to left

Nepal   NEP   1

2.11　　　Character size and Spacing

There are two basic elements for character layout for text.

One is character size and the other is line spacing.

rem-1: Spacing between characters is not as significant as line spacing or character size.

2.11.1　　Character size　　　　　　　　(CHARACTER SIZE)

There are three measurement systems available for font size.

Didot point (European size) (D)

Pica point (English-American type) (P)

Local Size (eg 号 in Japan) (L)

Also, in some countries, there is popular range of character size.

9-12 Pica points are usually considered as normal sizes because of their popularity (in US). A review was done to see if there are any specific preferences other than 9-12.

		Measurement system	Popular size
Nepal	NEP	P	no specific requirement
remarks:	10 Pica point = 9.35 Didot point = 3.514 mm = 0,1383 inch		
	10 Didot point = 10.699 Pica point = 3,759 mm = 0.1480 inch		
remarks:	See annex E for point size conversion		
remarks:	Related standard: JIS Z 8305, KS A 0201		
remarks:	IEC "Guidance for Conveners of Working Group and Project Leaders" specifies Helvetica 8,10 and 12 points for IEC standards. (but, ISO/IEC directives part-3 does not specify any)		

Clause headers: Helvetica Bold 10/12 point, Sub-clause headers: Helvetica 12/10 point, Normal paragraphs: Helvetica 10/12 point, Note and footnote: Helvetica 8/10 point.

2.11.2   *Line spacing*   *(CHARACTER SIZE)*

Requirements for line spacing depend on the writing system. Usually, there are no special requirements other than using the US origin standard spacing. But some script(s), such as Thai, need special consideration on line spacing.

Nepal   NEP   no special requirement

remarks: Related standard: ISO 4882

2.12　　　Preferred Font Style

There are many styles of fonts available in a market. The following information is usually needed by font providers.

A　　Requirements for richness of typefaces (How many typefaces are needed?)

B　　Preferred style may differ from country to country even for same script (Name it if any)

C　　Names of typical and popular typefaces and/or family of typefaces

D　　Typeface design matching between Local character and Latin character.

Remarks: Related standard: ISO/IEC 9541-1/2

2.12.1　　Number of typefaces　　　　　　　　(FONT)

Nepal　　　　NEP　Latin script　> 100

Local script　> 50

2.12.2　　Typical/Popular typefaces　　　　　(FONT)

Nepal　　　　NEP　Latin script　Both SERIF and SANS-SERIF are used

Local script　　Both SERIF and SANS-SERIF fonts in Devanagari are used.

Remarks: Related standards are JIS Z 8903, JIS Z 8904, JIS Z 8905, KS A 0202, KS A 0203

Remarks: IEC is requesting Helvetica as standard fonts for IEC standards. (see 2.11.1 rem-2)

2.12.3 Consideration on typeface design matching information (FONT)

Most local character sets have typeface requirements of both Serif (styled) and Sans-Serif (non-styled).

In some cases, those local typefaces can not share Serif and Sans serif of Latin typefaces for mixed use.

When this happens, typeface for Latin script should be redesigned to match the local script because of its impacts on character height and character line thickness.

However, the impact of those design difference are script dependent. (Culturally different)

Nepal　　　　NEP　no consideration is needed

2.12.4　　Font attribute　　　　　　　　　　(FONT)

This is an extra note for technology selection. (Not cultural requirement)

Due to the relatively low number of characters in the Latin like character sets, font attributes such as UNDERLINE and SHADOW has been provided to produce different fonts.

2.13   Character attribute

Normally, characters in a character set are categorized into several ways for convenience of data processing. In case of ISO/IEC 646 (ASCII, typical categorization for a culture is done by uppercase, lowercase, digit and space etc....)

It is very natural to have cultural dependent categorization needed for both national characters and non national but commonly used characters (such as ISO/IEC 646)

NEPAL   NEP   not yet available   note-1

note-1: As of now, all non-ASCII character in Nepali language character sets are simply categorized as alphabetic graphic characters. However, it is anticipated that some categorization will be introduced for those characters sooner or later.

2.14   Paper Size

Popular (or widely used) paper sizes vary from country to country

There are 5 kinds of paper sizes available

Type-A: A-size per ISO 216

Type-B: B size per ISO 216

Type-LT: Letter size   8 inch X 11 inch

Type-LG: Legal size (LG)   8 inch X 14 inch

Type-LCL: Local unique or Local Traditional size(s)

popular measure   popular size

Nepal   NEP   A, B, LG   A4, A3, A5

Remarks: Note that continuous forms used for IT processing (ISO 2784) is not A or B size but Letter size. Therefore, Letter size is in use in all countries for IT purpose and in some cases it is also the defacto standard.

Remarks: For A and B size, see Annex D

Remarks: Related standards: ISO 216, ISO 478, ISO 593, ISO 2784, GB 9704, IS 1064, KS A 5201, KS G 2504, KS G 2505, KS G 2506, KS G 2509, PNS 70, PNS 222, TIS 262

Remarks: Standards related to size of envelopes and post cards: ISO 269, ISO 328, ISO 6924, JIS S 5502, JIS S 5503, KS G 2501, PNS 269, TIS 380

2.15 Page Margin

There are at least two cases for page margin requirements.

Case-1: National or cultural requirements has the highest priority

Case-2: Rather than national or cultural requirements, there are also important application-dependent requirements (for example, Tax return form itself has firm margin requirement but the margin itself does not necessary to follow any standards)

Case-3: Reasonable amount of margin is needed, but any user defined requirements are available

Case-extra: absolutely don't care

Common margins

Nepal   NEP   no specific requirement

ISO 6422

| Top margin: | 10 plus minus 0.5 mm |
| Left margin: | 20 plus minus 0.5 mm |

GB 9704 (CNA)

Top margin	30 mm
Bottom margin	20 mm
Left margin	25 mm
Right margin	20 mm

Remarks: Related standards: ISO 838, ISO 3535, ISO 6422, ISO 8439, GB 9704, IS 6298, JIS S 5505, JIS S 5507, JIS S 6041, PNS 235

Remarks: For a documents for international use need to fit for both A4 and Letter size paper when copied.

IEC: "Guidance for Conveners of Working Groups and Project Leader" recommends:

Top/Bottom margin = 30 mm (1.18 in), Left inner margin = 23.1mm (0.91 in) and Right outer margin

= 28.9mm (1.14 in) for A4 size paper. (ISO/IEC directives part-3 has no requirements).

2.16   Page Layout

There is a possibility that cultural dependent printed page layout can be used for IT purpose.

One of them is location of page number with in a sheet which is not a strong requirement, but natural common location within each countries and cultures.

2.16.1   *Page Layout*   *(PAGE LAYOUT)*

In most cases, there are no cultural/country specific page layout requirements.

However, there exists some special page layout that is widely used.

Nepal   NEP   n/a

Fukurotoji: Single sided, dual columns (in case of vertical writing, wide line spacing at middle of paper) and (normally) landscape layout.

Folding the printed form at center (becomes single column or normal vertical pages) makes it as double sided document.

Staple at cut-end side and apply shared seal with other sheet.

This process guarantees "no-missing pages" and "not-changed".

2.16.2   *Page number location*   *(PAGE LAYOUT)*

Location of page numbers in a page does not really conform to any cultural convention but it is more of a country dependent format.

Nepal   Nep   no preference

2.17 Business letter format/layout

Business letter format is separated into:

a. Main letter copy

b. Envelope

Availability table of key business letter (main letter) elements for each country

	Letter element	NEP
1	Document Identifier	○
2	Date	○
3	Addressee's name	○
4	Addressee's title, department	○
5	Address's company name	○
6	Addressee's address, Tel., Fax.	○
7	Sender's name	○
8	Sender's title, department	○
9	Sender's company name	○
10	Sender's address, Tel., Fax.	○
11	Document title	○
12	Salutation	○
13	Main body	○
14	Itemized note	△
15	Ending salutation	○
16	Attachment list	○
17	Signature (or Stamp or Seal)	○
18	P.S.	△
19	CC or BCC	○

Remarks: ○ is YES,
             △ is OPTIONAL
             Blank is NO

Location of Key business letter elements

	Front	Body	Ending
NEP	1, 2, 3, 4, 5, 6, 9, 10	12, 13	7, 8, 15, 16, 17, 19

Remarks: Sequence of item numbers does not have any significant meaning.

2.17.1   Main letter copy   (BUSINESS LETTER)

Nepal   NEP   NEP style

Remarks: Related standards: ISO 6422

Nepal   NEP style

Ref: Date

Name of recipient
Designation
Address of recipient

Subject:

Salutation

main text

Ending salutation

Final salutation
Signature
(Name of sender)
designation

Encl: if any
CC: If necessary

2.17.2   *Envelope*   *(BUSINESS LETTER)*

Nepal   NEP style

Name and Address
of recipient

(Name and address of
Sender's company)
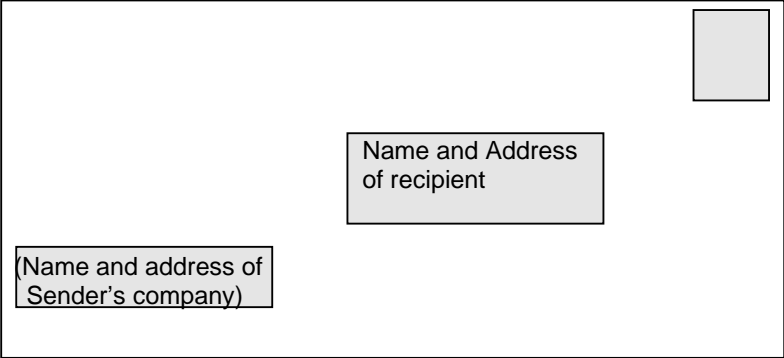
2.18   Personal letter format/layout

Format and layout requirements on personal letter is separated into:

Preference on main letter copy and Preferred envelope layout

2.18.1   *Main letter copy*   *(PERSONAL LETTER)*

Nepal   NEP   NEP style

note-1:   Personal official letter is the same as business letter in 2.17.1

Personal friendly letter has no format

NEP style

```
                                                        Place:
                                                        Date
Salutation (Dear recipient name is typical)




                            main text



                                                        Ending salutation

                                                        (Name of sender)
```
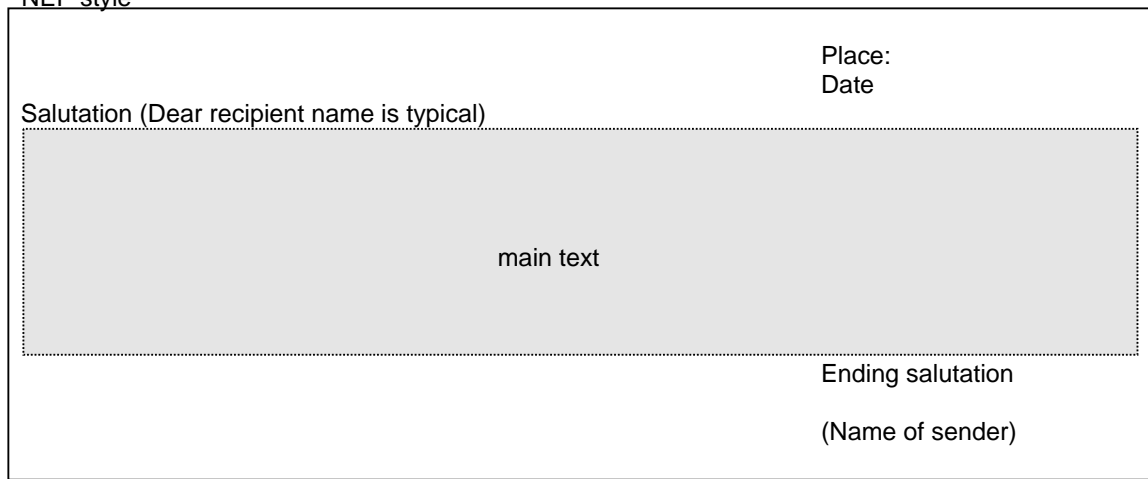
2.18.2   *Envelope*   *(PERSONAL LETTER)*

Nepal   NEP   NEP style

```

                              TO    Name and address of recipient

            Name and address of sender
```
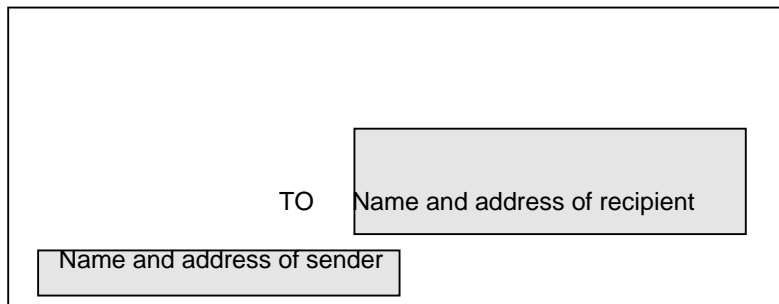
2.19 Postal Address format

The format of postal address used in this region is usually of two types.

Type-1: Bottom up style starting with house number and ends with Country name (US style)

Type-2: Top down style starting with Country and ends with house number (Chinese style)

It is noticed that there is a variation within each same type. The difference is a location of Zip code.

It is also noticed that when Roman Alphabet is used to write an address, Type-1 is used.

	Type	Format	Example
Nepal	NEP 1	Name of recepient	Mr. Dambar Bahadur Khadga
		Designation of recipient	Member
		Company name	High Level Commission for IT
		Street no., Street name	Singha Durbar
		City/Town/Zone	Kathmandu
		Country	Nepal

Remarks: Related standard: ISO 11180

2.20 Telephone Number Format

2.20.1 *Format*

Format to print and speak telephone numbers are different from country to country.

However, since the difference does not have any significance for the IT process, this report simply describes the differences.

Nepal   NEP   +977-1-2222222

                      Mobile +977-9851022222

                      +1-4222222

              <country code>- <area code M-digits> - <number N digits>

              Domestic: <area code 0 + M digits> - <number N digits>

Remarks: For some countries, carrier code for alternative carrier to be added (mostly in front of area code)

Remarks: CCITT E.123 recommends a format for telephone number

Remarks: Related standards: CCITT E.123:1988, CCITT E.163:1988

2.20.2 *Country code*   *(TELEPHONE NUMBER))*

Following is the country code of Nepal:

Nepal   NEP   977

2.21 Measurement Systems

Almost all countries/culture have their own traditional measurement system.

On the other hand, SI/metric system is used internationally as the measurement system.

There is degree of difference of usage of traditional system for business and daily life.

For example, Nepal is in the metric system though there is a traditional system. The need for the traditional system is very low for IT application. In US, the feet-pound system is still used very commonly for daily life even though the metric system is adopted by law long time ago.

Data in this section describes the common measurement systems for IT use.

Nepal	NEP	metric SI, CGS	Nepal has gone into the Metric System. However, there are many traditional measuring unit(s) for today's daily use in Nepal. However, the traditional units are not used in IT application. Examples of traditional measurements were: Feet-Pound-System, real traditional units like Mana, Pathi, Dharni, Tola, Ratti, Ropani, Anna, Paisa, Bigha, Kattha, Dhur, Haat, etc.

2.21.1 Temperature measurement unit (MEASUREMENT)

Common unit of measure for temperature are:

Type -C: in centigrade Celsius

Type -F: in Fahrenheit

Nepal NEP C except for medical purposes where Type-F is still used but gradually moving towards Type C.

2.22 Legal and regulatory requirements

Note-1: There are many legal and regulatory requirements available in each country.

In this booklet, for practical purpose, Legal and Regulatory refer to those requirements which limit the use of (US is used as bench mark) imported IT products within the country (for example, need to meet local safety regulations, unique to local tele-communication protocol, etc.,)

Nepal   NEP   N/a

Remarks: Related standard: ISO 9241

2.23 Message and Dialogue

There are two considerations used for message and dialog (in IT application).

One is a language(s) being used in country and another is acceptance of English within IT application.

It is often desirable to have local language capability in every thing, but in a reality, the number of languages to be supported might have a limitation. Due to the long history of IT, acceptance of English for limited IT application is reasonably high.

2.23.1 Languages of country (MESSAGE AND DIALOG)

		Official language	Comments
Nepal	NEP	Nepali	Other national languages are Newari, Bhojpuri,

(TAKE LIST OF NATIONAL LANGUAGES AS DETAILED FROM CBS FROM DR. YOGEDNRA YADAVA) Nepali is the Language of the Nation as described in Nepal's Constitution as

2.23.2 Acceptance of English in IT application (MESSAGE AND DIALOG)

Nepal	NEP	Accepted now, but gradually moving towards to Nepali language

2.23.3 YES and NO (MESSAGE AND DIALOG)

Use of YES and NO is confusing (from native speaker of English view) in some culture.

For example, for the question You did not have lunch. didn't you?

Answer is XXXX, I did not have lunch.

Type-1 XXXX = NO (This is normal English. YES/NO is depending on following sentence)

Type-2 XXXX = YES (This is for some case, YES/NO is depending on the fact of TRUE/NOT TRUE)

As a matter of fact, most of Orientals make this mistake (from English view). This fact implies the guidance for design of prompt of system and application. "Do not use negative question"

Nepal	NEP	1

2.23.4 Character Set

Though ISO/IEC 10646 is intended to include every necessary characters in it, there are still national (and/or defact) standard(s) of coded character set of the country.

For those character sets, see annex A of this Data Book.

2.24 Person's name (mode of address)

The following questions need to be answered about cultural dependency of personal name.

Starting point:

Most of US origin software assume that world standard (and most basic) form of persons name is formed by family name and first name, and sequence is first name then family name.

Adding middle name is next up-grade for the basic assumption.

Questions about format of name:

Question-a: Is sequence right?   Most of Asian naming is family name first or in other sequence.

Question-b: What else is needed for formal name?   Such as middle name.   And where?

Question-c: When Latin character is used, how do we describe local name?

Question-d: Where is a location of personal title?

> d-1,   In local form

> d-2,   In Latin (transformed form)

Question-e: Is saluting needed for name?   If yes, at which location?

Question-f: When saluted name is needed, is that for absolute position or relative position?

Other questions:

Short form: What is the preferred method when short name is needed?

Indexing: When indexing of name is needed (such as phone book), what are the preferred key(s)

Women's name: Is it changed when married?

2.24.1 Basic format of name (Question -a, -b)   (PERSON'S NAME)

Type-1   First name (1st), then Family name (Fml)

Type-2   Family name (Fml), then First name (1st)

Type-3   Other unique to the culture format

		Type
Nepal	NEP	1

2.24.2 Transformation method in Latin character (Question-c) (PERSON'S NAME)

Nepal   NEP   First and family name start with Capital, no hyphen or comma.

Remarks: Related standards: ISO 233, ISO 3602, ISO 7098

2.24.3 Short form of name   (PERSON'S NAME)

Nepal   NEP   1st and 2nd name can be changed to Single capital letter

Full	Shortened	Alternatives
Abdul	Abd.	
Acharya Dixit	AD	
Ahmad	A.	
Bahadur	Bdr	
Bhakta	Bkt	
Kumar	Kr	
Muhammad	Mohd.	Muhd., Md., M.
Prasad	Pd	
Sumsher Jung Bahadur	SJB	

2.24.4   Indexing of name   (PERSON'S NAME)

Nepal   NEP   Start with first name. In character order

2.24.5   Women's name when married   (PERSON'S NAME)

Nepal   NEP   Change family name to husband's optionally retaining maiden family name is increasing.

2.24.6   Location of personal title and salutation (Question -d, -e,-f)   (PERSON'S NAME)

Location Type-1 Front of personal name
Location Type-2 End of personal name
Saluting Type-A Absolute salutation   (such as Mr.)
Saluting Type-R Reflect relative relation between people
          (Wording is depending on relative position of each other)

		Local form	Latin form	Salutation
Nepal	NEP	1	1	A

2.24.7 Title or Saluting in local language and character (PERSON'S NAME)

		Generic word	Mr.	Mrs.	Miss	Ms
Nepal	NEP	श्री	श्रीमान्	श्रीमती	सुश्री	n/a
		Shri	Shrimaan	Shrimati	Sushri	n/a

2.25   Colour usage and significance

It is a well known fact that almost all cultures have specific significance for some colours.
In addition, there are a couple of things that have to be considered when describing the usage of colour in a culture.
a.   Name of colour is not one to one correspondence (even in English). For example, purple for one culture is pink for another.
b.   Degree of significance varies. Therefore it is very difficult to describe colour significance.

In addition, there are two specific things that were noticed:
c.   Colour of national flag: Some countries are very sensitive about colour (or combination of colour) of national flag.
d.   Specially defined owner of specific colour: Some country (or culture) has a symbol colour(s) for specific matters. Sometimes significance (or sensitivity) is very high for the colour, in some case, it is not.

2.25.1   *Colour in national flag*   *(COLOUR)*

Nepal   NEP   Red (Sacrifice), White (Peace), Blue (Prosperity)   very significant
(REFER TO CONSTITUTION OF NEPAL)

2.25.2   *Colour for defined (and significant) meaning*   *(COLOUR)*

Nepal   NEP   White (purity)
                      Red (sacrifice)

Remarks: Traffic light Red, Yellow and Green (Blue) are the same in every country

2.25.3   *Colour usage or general meaning of colour*   *(COLOUR)*

Nepal   NEP   Red--crime, danger (area), sindur, sign of married life for women (saubhagya)
                      Black--inauspicious, evil
                      White-- purity, Holiness, peace, sad affair
                      Orange---religious for Hindus and Buddhists
                      Green-- prosperity, safety, life
                      Yellow---happiness (human behavior)

Remarks: Related standards: ISO 3864, JIS Z 9101, KS A 3501, KS A 3502, PNS 3864

2.26   Taboo Items

There are many taboo items in each culture and country, some may be the same for most of cultures and some are different from culture to culture.
However, as of current technology, most of them may not have any impact on generic IT application and products.   There might be some, and following are samples of those taboos.

As technology progress, however, some taboo items may have impact on IT application in future. For example, if ICON in shape of hand need to click some sensitive shape with Thai culture, then acceptance of the application in Thai may be low.

The common answer for most countries is: Though there are many taboo items in the culture, as for IT products in the past, there were no specific item(s) which were forced to be localized due to the reason of taboo.

Black ink is used for inauspicious invitations and red ink is used for auspicious occasion invitations.

Annex A

Coded Character Set Standard(s)

A.1 International Standard

ISO/IEC 646:1991	ISO 7-bit coded character set for information interchange
ISO/IEC 2022:1994	Character codes structure and extension technology
ISO/IEC 4873:1991	ISO 8-bit code for information interchange -structure and rules
ISO/IEC 6429:1992	Control functions for coded character sets
ISO 6936:	Conversion between the coded character sets of ISO 646 and ISO 6429-2 and
the	CCITT international telegraph alphabet No.2 (ITA2)
ISO/IEC 6937:1994	Coded graphic character set for text communication
ISO/IEC 8859 -1/10	8-bit single byte coded character graphic character set(s)
ISO/IEC 10367:1991	Standardized coded character set for use in 8-bit code
ISO/IEC 10538:1991	Control function for text communication
ISO/IEC 10646 -1:1993	Universal multiple-octet coded character set (UCS)

A.2   National Standards

China	CNA	GB 1988-88	(ISO 646-83)
		GB 2311-89	(ISO 2022)
		GB-2312-89	Code of Chinese ideograms set for information interchange - Basic set
		GB-7590-87	Code of Chinese Ideograms set for information interchange - The 4th supplementary set
		GB-8565-88	Coded character set for text communication
		GB-12345-90	Code of Chinese Ideograms set for information interchange - Supplementary set
		GB-13000-93	(ISO/IEC 10646-1)
Hong Kong	HKG	no specific to HKG standard.	
		HKG uses international standard(s) and/or other national standard(s) on	
products			for export, depending on the country of destination
India	IND	IS 13194:1991	Indian script code for information interchange-ISCII
Indonesia	INA	n/a	(ISO/IEC 646 is usually used)
Japan	JPN	JIS X 0201 -1976	Code for Information Interchange
		JIS X 0202 -1991	(ISO/IEC 2022)
		JIS X 0208 -1990	Code of the Japanese graphical character for
information			interchange
		JIS X 0211 -1994	(ISO/IEC 6429)
		JIS X 0212 -1990	Code of the Supplemental Japanese graphic character set for Information Interchange
		JIS X 0221 -1995	(ISO/IEC 10646-1)
Korea	KOR	KS C 5528 -1976	Coding of characters for printing telegraph and their arrangement in teleprinter keyboard
		KS C 5601 -1992	Code for information interchange
		KS C 5620 -1977	(ISO 2022)
		KS C 5636 -1993	Code for information interchange (Latin character)
		KS C 5657 -1991	Extension code sets for information interchange

KS C 5700 -1995   (ISO/IEC 10646-1)

Malaysia	MAS	MS 1368:1983	Jawi character set
		MS ISO/IEC 646:1993	(ISO/IEC 646)
		MS ISO/IEC 2022:1993	(ISO/IEC 2022)
		MS ISO/IEC 4873:1993	(ISO/IEC 4873)
		MS ISO/IEC 6429:1993	(ISO/IEC 6429)
		MS ISO 6936:1993	(ISO/IEC 6936)
		MS ISO/IEC 6937-1:1993	(ISO/IEC 6937-1)
		MS ISO/IEC 6937-2:1993	(ISO/IEC 6937-1)
		MS ISO/IEC 10646:part1:1994	(ISO/IEC 10646-1)
Philippines	PHI	ISO/IEC 10646-1	Universal Multi-Octet Coded Character Set : Part-1
Singapore	SIN	SS	Singapore Standard
Thailand	THI	TIS 620	Thai Character Codes for Computers (1986, 2ed 1990)
		TIS 820	Layout of Thai Characters on Computer Keyboards (1988)
		TIS 988	Recommendation for Thai Combined-Character Codes and Symbols for Line-Graphic for Dot-Matrix Printers (1990)
		TIS 1074	6-bit Teletype code (1992)
		TIS 1075	Conversion between computer coded and 6-bit Teletype code (1992)

Annex B

List of standards

B.1 International Standards

CCITT E.123:1988	Notation for national and international telephone numbers
CCITT E.163:1988	Numbering plan for the international telephone services
ICS 01.080.xx	Graphic Symbols ICS(International Classification for Standards)
ISO 31-0/13:1992	Quantities and units
ISO 216:1975	Paper - trimmed size -A and B series
ISO 233:1984	Transliteration of Arabic characters into Latin characters
ISO 269:1985	Correspondence envelopes -Destination and sizes
ISO 328:1989	Picture Postcards and lettercards -size
ISO 478:1974	Paper-Untrimmed size for the ISO A size-ISO primary range
ISO 593:1974	Paper-Untrimmed size for the ISO A size-ISO supplementary range
ISO 838:1974	Paper -holes for general filing purpose -Specification
ISO 1000:1992	SI units and recommendation for the use of their multiples and of certain other units
ISO/R 2014:1971	(revised to ISO 2014:1976, and then replaced by ISO/IEC 8601:1988)
ISO 2047:1975	Graphical representations for the control characters of 7 -bit coded character set
ISO 2784:1974	Continuous forms used for information processing -sizes and sprocket feed holes
ISO 2955:1983	Presentation of SI and other units in systems with limited character sets
ISO 3166:1993	Codes for the representation of names of countries
ISO 3307:1975	(This standard is replaced by ISO 8601:1988)
ISO 3535:1977	Forms design sheet and layout chart
ISO 3602:1989	Romanization of Japanese (Kana script)
ISO 3864:1984	Safety colors and safety symbols
ISO 4217:1990	Code for representation of currencies and funds
ISO 4882;1979	Line spacing and character spacing
ISO 6422:1985	Layout key for trade documents
ISO 6093	Representation of numerical values in character strings for information interchanges
ISO 6924:1983	Correspondence envelopes -Vocabulary
ISO 7001:1990	Graphical Symbols for use on public information sign
ISO 7098:1991	Romanization of Chinese
ISO 8439:1990	Form design -Basic layout
ISO/IEC 8601:1988	Representation of dates and times
ISO 9241-1/3:1992	Ergonomic requirements for office work visual display terminals (VDTs)
ISO/IEC 9545-1/3:1991	Font information interchange
ISO 11180:1993	Postal addressing -format

B.2 National Standards

China   CNA   GB 2894-88 (ISO 3864-1984)
                      GB/T 7408-94 (ISO 8601-88)
                      GB 9704-94 Layout key for official document of administration
                      GB/T 10001-1994 (ISO 7001-1990)
                      GB 12406-95 (ISO 4217-90)
                      GB 14392-93

Hong Kong   HKG   no specific to HKG standard.
                        HKG uses international standard(s) and/or other national standard(s) on

products   for export, depending on the country of destination

India   IND   IS 2:1960   Rules for Rounding Off Numerical Values (reviced)
                      IS 1064:1980   paper size (ISO 216:1975, ISO 478:1974, ISO

593:1974)

                      IS 1890:1982   Units and Symbols (ISO 31:1981 series)
                      IS 6298:1971   Guide for Selection of Type and Page Layout in Text

Books

                      IS 7900:1976   Method for writing calendar dates in all numeric forms
                                    (ISO/R 2014:1971)
                      IS 10005:1994   (ISO 1000:1992)
                      IS 10934:1984   Representation of the time date (24 hr) (ISO 3307:1975)
                      IS 11366:1985   Representation of units (ISO 2955:1985)

Indonesia   INA   n/a

Japan   JPN   JIS S 5502 -1993   Envelopes and Pocket
                      JIS S 5503 -1976   Writing Pads
                      JIS S 5505 -1994   Office files (flat file)
                      JIS S 5507 -1983   Multi-Plong Binders
                      JIS S 6041 -1982   Paper Punches
                      JIS X 0124 -1981   Representation of unit symbols for information
                                          interchange
                      JIS X 0209 -1976   (ISO 2047)
                      JIS X 0301 -1977   Identification Code of Dates
                      JIS X 0302 -1977   Identification Code of Times
                      JIS X 0304 -1988   (ISO 3166)
                      JIS Z 8202 -1985   (ISO 31/0-5, 7, 8, 10. 13)
                      JIS Z 8203 -1985   (ISO 1000)
                      JIS Z 8305 -1962   Dimension of Printing types
                      JIS Z 8401 -1961   Rules for Rounding off of numerical values
                      JIS Z 8903 -1984   Standard Type of letters Used in Mechanical Engraving
                                        (Joyo Kanji, Common use Chinese characters)
                      JIS Z 8904 -1976   Standard Type of letters Used in Mechanical Engraving
                                        (Katakana characters}
                      JIS Z 8904 -1976   Standard Type of letters Used in Mechanical Engraving
                                        (Arabic Figures and Roman Types)
                      JIS Z 9101 -1995   (ISO 3864)
                      JIS Z 9104 -1995   Safety Symbols

Korea	KOR	KS A 0021 -1962	Rules for rounding of numerical values
		KS A 0105 -1995	SI units and the use of their multiples and of certain
other			units
		KS A 0201 -1977	Dimentions of printing types
		KS A 0202 -1981	Standard type of letters used in mechanical engraving (daily-use Chinese characters)
		KS A 0203 -1981	Standard type of letters used in mechanical engraving (Arabic figures and Roman type)
		KS A 3501 -1990	General code of safety colours
		KS A 3502 -1989	General rules for coloured light for safety
		KS A 5201 -1990	Trimmed size of paper
		KS A 5401 -1972	Writing of calendar dates in all-numeric form
		KS A 5402 -1986	Numbering of weeks
		KS C 5610 -1992	Identification code of dates and times
		KS C 5713 -1992	(ISO 2047)
		KS C 5621 -1980	Unit symbols for information interchange
		KS C 5676 -1994	Representation of SI and other units in systems with limited character set
		KS C 5713 -1992	Graphycal representations control characters for information interchange
		KS G 2501 -1988	Envelopes and pockets
		KS G 2504 -1987	Report papers
		KS G 2505 -1987	Scrtchboard and drafting papers
		KS G 2506 -1987	Writing pads
		KS G 2509 -1987	Fools-cap paper
Malaysia	MAS	MS 1134: 1989	Method for representing SI unit in information processing systems with limited character sets
		MS ISO 6093: 1993	(ISO 6093)
		MS ISO/IEC 9541-1:1995	(ISO/IEC 9541-1)
		MS ISO/IEC 9541-2:1995	(ISO/IEC 9541-2)
		MS ISO/IEC 9541-3:1995	(ISO/IEC 9541-3)
		MS ISO/IEC 9545-1:1995	(ISO/IEC 9545-1)
		MS ISO/IEC 9545-2:1995	(ISO/IEC 9545-2)
		MS ISO/IEC 9545-3:1995	(ISO/IEC 9545-3)
Philippines	PHI	PNS 01-1983:	A standard for standards
		PNS 70-1986:	Specification for bond paper, white and colored
		PNS 222-1988:	Specification for paper for plain paper copies
		PNS 269-1985	Specification for envelopes
		PNS 3864-1984/1989	Safety colors and safety signs
		PNS 235-1989	Flexible prong paper fasteners
		PNS 558-1991	Ball point pens and refills
		PNS 293-1991	Representation of date and times
		PNS 1082-1992	Public information symbols
		PNS 1083-1992	Development and Principles for application of public information symbols
Singapore	SIN	n/a	
Thailand	THI	TIS 262	Untrimmed Stock Sizes of Paper (1978)
		TIS 380	Sizes of Correspondence Envelope (1978)
		TIS 1099	Rovincial identification code for Data interchange (1992)
		TIS 1111	Representation of Date and Time (1992)

Annex D

Paper Size

A series				B series	
	4A0	1682 X 2378 mm			
	2A0	1189 X 1682 mm			
	A0	841 X 1189 mm		B0	1000 X 1414 mm
	A1	594 X 841 mm		B1	707 X 1000 mm
	A2	420 X 594 mm		B2	500 X 707 mm
	A3	297 X 420 mm		B3	353 X 500 mm
	A4	210 X 297 mm		B4	250 X 353 mm
	A5	148 X 210 mm		B5	176 X 250 mm
	A6	105 X 148 mm		B6	125 X 176 mm
	A7	74 X 105 mm		B7	88 X 125 mm
	A8	52 X 74 mm		B8	62 X 88 mm
	A9	37 X 52 mm		B9	44 X 62 mm
	A10	26 X 37 mm		B10	31 X 44 mm

C series			D series		
	C0	917 X 1297 mm		D0	771 X 1000 mm
	C1	648 X 917 mm		D1	545 X 771 mm
	C2	458 X 648 mm		D2	385 X 545 mm
	C3	324 X 458 mm		D3	272 X 385 mm
	C4	229 X 324 mm		D4	192 X 272 mm
	C5	162 X 229 mm		D5	136 X 192 mm
	C6	114 X 162 mm		D6	96 X 136 mm
	C7	81 X 114 mm		D7	68 X 96 mm
	C8	57 X 81 mm		D8	48 X 68 mm

Annex E

Points Size (US/UK vs. Europe)

| US/UK size | | Europe size | |
Pica points	inch	Didot points	mm
06	0830	05.608	2.108
08	1107	07.477	2.811
10	1383	09.346	3.514
12	1660	11.215	4.217
14	1936	13.084	4.920
16	2213	14.954	5.622
18	2490	16.823	6.325
20	2766	18.692	7.028
24	3320	22.430	8.434

| Europe size | | US/UK size | |
Didot points	mm	Pica points	inch
06	2.255	06.419	0888
08	3.007	08.559	1184
10	3.759	10.699	1480
12	4.511	12.839	1776
14	5.263	14.979	2072
16	6.014	17.118	2368
18	6.766	19.258	2664
20	7.518	21.398	2960
24	9.023	25.678	3552

Annex F

List of Nepali Language in Information Technology, Steering Committee Members

Committee Member	Representing Organization
Dambar Khadka *Chairman*	High Level Commission for Information Technolog
Allen Bailochan Tuladhar *Member-Secretary*	Unlimited NuMedia
Amar Gurung	Madan Puraskar Pustakalaya
Alok Siddhi Tuladhar	Unlimited NuMedia
Kumardhar Sharma	Royal Nepal Academy
Ghamraj Luintel	Radio Sagarmatha
Dinesh Chapagain	Kathmandu University
Deepak Rauniyar	Computer Association Nepal
Rupesh Shrestha	Internet Service Providers Association of Nepal.
Madhur Kumar Shrestha	Asian College of Technology & Management
Dr. Yogendra Yadav	Tribhuvan University
Bijendra Shrestha	Pacific Commercial Company
Rajesh Shakya	IT Professional Forum
Ram Saran Khakurel	Nepal Soft Technology
Shree Om Shrestha	Gorkhapatra Corporation
Subodh Sudhakar Risal	IT Education Association of Nepal.

Our Sincere appreciation goes to following participants on "**Nepal's Cultural Convention For Information Technology Data Book finalization program**" without whose active Participation this data book could not have been finalized.

1. Mr. Dambar Bahadur Khadga- High Level Commission for Information Technology
2. Prof. Dr. Basudev Tripathi-Royal Nepal Academy
3. Prof. Dr. Mangal Raj Joshi-Panchanga Nirnayak Samiti
4. Prof. Dr. Hemang Raj Adhikari- Tribhuwan University
5. Dr. Yogendra Yadava- Tribhuwan University
6. Mr. Atma Ram Ghimire- High Level Commission for Information Technology
7. Mr. Bel Prasad Shrestha- High Level Commission for Information Technology
8. Mr. Mahesh Singh Kathayat- National Information Technology Center.
9. Mr. Allen Bailochan Tuladhar-Unlimited Numedia
10. Mr. Gaurav Giri-Ministry of Information and Communication
11. Mr. Sohan Bahadur Nyachho- Ministry of Science and Technology
12. Mr. Purushottam Ghimire- Ministry of Science and Technology
13. Mr. Laxmi Prasad Gupta – National Bureau of Standards and Measurements
14. Mr. Durgendra Man Kayastha- Department of Survey
15. Mr. Binod Dhakal- High Level Commission for Information Technology
16. Mr. Hare Krishna Poudel- Postal Service Department
17. Mr. Raghu Nath Dhungel- Shangrila Informatics
18. Mr. Kamal Thapa Kshetri- Nepal Bar Association
19. Mr. Tarzan Rai- Curriculum Development Center
20. Mr. Badri Kumar Karki- Central Bureau of Statistics
21. Mr. Sanat Kumar Sharma- B.P. Koirala Development Board
22. Mr. Krishna Prasad Dhakal- Department of Information
23. Mr. Ramesh Man Singh-RONAST
24. Mr. Laxmi D. Guragain-Gorkhapatra Santhan
25. Mr. Alok Tuladhar-Unlimited Numdia
26. Mr. Rupesh Bhakta Shrestha- Infocom Pvt. Ltd./ISPAN/CAN
27. Mr. Amar Gurung –Madan Puraskar Pustakalaya(MPP)
28. Mr. Rajesh Kumar Shakya- Hitech Valley inet/ IT Professional Forum
29. Mrs. Sunaina Ghimire Pandey- Unlimited Numedia
30. Mr. Madhur Kumar Shrestha- Asian College of Technology and Management.