

**.भारत (.BHARAT) Country Code Top Level DOMAIN (ccTLD)
NAME**

Internationalized Domain Names (IDNs) - .IN Domain Registry

Policy Framework

&

Implementation

Government of India
Ministry of Communications & Information Technology
Department of Electronics & Information Technology
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CONTENTS

Particulars	Page No.
1. Background ...	1
2. Introduction / Overview	2
3. Internationalized Domain Names	4
4. .IN IDN Policy Framework & Implementation	5
- Major Policy Elements ...	6
- Institutional Framework ...	9
- Implementation Mechanism ...	10

Background

1. The Internet over time has become powerful, ubiquitous, empowering and liberating medium. The Internet with its immense transformational potential can provide the means for sustainable and inclusive development in a country of 1.25 billion people, in areas such as education, healthcare, financial inclusion and service delivery. India has presently 135 million Internet users and is expected to grow to 370 million by the year 2015. Local languages, content and culture will increasingly become important elements for the future expansion of the Internet. Mobile devices and applications as well as social media will be important determinants of this growth. In order to reach the benefits of the Internet to a larger part of the population use of local scripts and languages will be very critical.
 - 1.1 Internet Domain Names play an important role towards proliferation of Internet and its applications. Today almost all applications of Internet in education, commerce, governance, health sector, and entertainment are carried out through the web portals having Internet domain Names.
 - 1.2 One of the important requirements for Internet growth is the proliferation of content in the local languages. Growth of the websites in local languages has direct bearing with the development of content in local languages. Depiction of the URL of the website in local language will further go a long way in ensuring inclusive growth of Internet. The domain names in local languages are called Internationalized Domain Names (IDNs). IDNs

enable common users to navigate through the Internet in their local languages. One can have domain names in his/her local language for example in Hindi, that the domain name will look like www.रजिस्ट्री.भारत

1.3 IDNs have the potential to transform the Internet into a truly global and multilingual tool by enabling Internet users to navigate and communicate online in their preferred script/language. Keeping this in view and as part of “Internet Corporation for Assigned Names and Numbers (ICANN) fast track process”, the use of local language in country code top level domains was initiated in 2010.

India has 22 official languages which get written majorly in 11 scripts. Some of the scripts support several languages e.g. Devanagari script is used to write 11 official languages out of which 8 share the ccTLD .भारत which are Bodo(Boro), Dogri, Hindi, Konkani, Maithili, Marathi, Nepali, and Sindhi- .

2. Introduction / Overview

2.1 Internet domain names in local language also referred to as IDNs have assumed greater significance in the recent times with the Internet increasingly being used by diverse group of people all over the world as an effective medium for commerce, education, governance and communication. Therefore, in order to have a larger presence in the Internet space, the role of internet domain names in Indian scripts is an important element. Initially .Bharat (.भारत) in Devanagari script will be rolled out.

2.2 An IDN policy would mainly determine how conveniently an IDN second level name could be registered and maintained for the large number of Internet subscribers and addresses in the Indian languages. It will need to address, among other questions, the following:

- What are the domains available for registration?
- Are there any restrictions in registering domain names?
- Where can domain names be registered – including whether there is a single source or a distributed chain of Registrars?
- What prices are charged for registration, and what services do registrants receive in turn?
- Why a registrant would prefer to register an IDN?
- Is the process of registration simple, efficient, and reliable?

2.3 Apart from the policy, any Registry would need to meet the following criteria:

Security Registries should be resistant to hacking, and must also withstand denial-of-service (DoS) attacks. The hardware and software requirements for such secure systems are high.

Reliability Various user entities – government, businesses, citizens – rely on the Web sites and e-mail messaging that domain names enable. A Registry should provide reliable service, with 100% uptime.

Scalability The Registry infrastructure should accommodate growth without interruptions.

Adherence to Technical Standards The Internet functions well only when the concerned Agencies collaborate to create and maintain interoperable technical standards. Registry should adhere to such standards and practices announced by ICANN and other relevant technical standards bodies.

2.4 In order, therefore, to proliferate **.भारत** domain names, a policy framework is instituted, which is open and market friendly, to help brand ".भारत" in a big way and achieve its rightful place in the Internet space that it deserves.

3. **INTERNATIONALIZED DOMAIN NAMES (IDNs)**

The development of the Internet has mainly taken place in one language namely English leading to the language barriers for non-Latin script users. The Internet was mostly designed based on the 'simple English alphabet of the 26 Latin letters, the 10 digits (0-9), and hyphen (plus, of course, the dot which acts as a separator for domains).

Internet Engineering Task Force (IETF) has brought out the implementation standards for non-Latin and non-Roman characters and how the domain name is converted into punycode and how it further resolves in the root zone.

In computing, Punycode is an instance of a general encoding syntax (Bootstring) by which a string of Unicode characters is transformed uniquely and reversibly into a smaller, restricted character set.

Punycode is intended for the encoding of labels in the Internationalized Domain Names in Applications (IDNA) framework, such that these domain names may be represented in the ASCII character set allowed in the Domain Name System of the Internet.

Internationalized Domain Names are domain names or web addresses represented in local language characters.

IDNs in Indian Languages are one of the effective ways of further promotion of Internet among the Indian Populace. For proliferation and preservation of heritage, culture and content creation in multiple languages, it is essential to have the domain names in their own scripts. The process of Internationalization in terms of IDNs involves along with the standard DNS mechanisms like Nameprep, StringPrep, identification of the Character Set in the respective Script for each language, identification of the Variant Set (similar looking characters within the Script) and a Language based label validation rule set.

4. .IN IDN Policy Framework & Implementation

4.1 The policy under the new framework for implementation of IDNs focuses on creating liberal, efficient and market friendly processes and a distributed organizational structure. The **.भारत** IDN policy will all the policies that .IN follows except as noted in this document.

4.2 .IN Registry under the National Internet Exchange of India (NIXI), a not-for-profit company under Section 25 of Indian Companies Act 1956 promoted by the Department of Electronics and Information Technology (DeitY) in association with the Internet Service providers Association of India (ISPAI), has been entrusted with the responsibility of setting up the Registry for **.भारत** country code Top Level Domain name (ccTLD). For this the .IN Registry will act as the Registry for **.भारत** top level domain in India.

4.3 With the implementation of the new policy by .IN Registry, **.भारत** domain name registrations at the end of 1st year of its operation year has been targeted, with an average annual growth of 50% over a couple of years thereafter.

4.4 **Major Policy Elements**

The major elements of the new policy are as follows:

4.4.1 Unlimited generic **.भारत** and **कंपनी.भारत** registration will be open to public at 2nd level and 3rd level, except as provided herein.

4.4.2 The zones **सरकार.भारत** and **शिक्षा.भारत** will be reserved for the Government, and Educational institutions respectively. The registrations at the 3rd level in these zones will be carried out by the Government, or an institution identified by the Government. Taking into account the Internet services offered in their respective sectors, **.सरकार.भारत** registration will be handled by NIC, **शिक्षा.भारत** by ERNET, as Registrars in these zones.

4.4.3 State Governments and Union Territories can register under **.भारत** category.

4.4.4 One character domain registration will not be allowed at the 2nd and 3rd levels for use by the general public.

4.4.5 Prior to the opening of registration at 2nd / 3rd levels, following category of names in the respective languages will be reserved.

- Constitutional Authorities
- States/ Union Territories/ Cities
- Specific Names for Registry use

4.4.6 Trademark owners, registered companies and owners of intellectual property have a legitimate interest in protecting their brand. In the Internet domain, it is achieved by having a “Sunrise Period”. A Sunrise period of 90 days from the opening of registration at 2nd / 3rd levels will be announced during

which genuine registrations with proper verification will be allowed as per the policy for these registrations. The details of sunrise period would be as follows

Sunrise A (Indian Registrant holding Indian Trade marks)	45 days
Sunrise B (Overseas Registrant holding Indian Trade Marks)	30 days
Quiet Period	15 days
Sunrise C (Existing Registrant holding ASCII domain name .in)	15 days
Quiet Period	5 days

Thereafter, the registrations will be open to public on first come first served basis.

4.4.7 The .IN Registry will have authority to deny or suspend the IDN registration to any one if it conflicts with the sovereign national interest or public order.

4.4.8 The .IN Registry may also open newly created generic top level zones, e.g. the Devanagari equivalent for offering registrations under these categories under IDN domain name.[More clarity is needed here, preferably examples]

4.4.9 A comprehensive Dispute Resolution Policy (DRP) will be adopted in line with guidelines prescribed Uniform Resolution Policy (UDRP) adopted by the ICANN. This will be in line with the relevant provisions of the Indian IT Act 2008 as amended from time to time.

4.4.10 Any dispute involving the .IN Registry will be considered by a duly appointed Dispute Resolution Committee.

4.4.11 The .IN Registry would also permit existing INDRP Arbitrators in the event they agree to or appoint new arbitrators, through a process of open selection, who can be approached by any aggrieved party (ies) for redressal of grievance related to IDN with the Registrars. The decision of the Arbitrator shall be binding on both the parties. A Service Fee will be prescribed which will be required to be paid to the Arbitrator by the aggrieved party for such arbitration.

4.4.12 Government of India will be the final authority for **.भारत** domain name policy. This will ensure its administration in accordance with the public interest and relevant laws of the country.

4.5 **Institutional Framework**

The following will be the institutional framework of the .IN Registry:

4.5.1 The .IN Registry will be a Not-for-Profit organization, and will function as an autonomous body, accountable to the Government of India. Its

responsibility will be to maintain .भारत domain to ensure its operational stability, reliability and security.

4.5.2 An executive order through a gazette notification will be issued by the Department of Electronics and Information Technology (DeitY), Government of India according a legal status to the Registry for .भारत domain in India. It will also mention the role of National Informatics Centre (NIC) and ERNET as Registrars for handling सरकार.भारत and शिक्षा.भारत registrations respectively.

4.5.3 The .IN Registry by itself will not carry out .भारत IDN registrations. It will do so through a number of Registrars to be appointed by it through an open process of selection on the basis of transparent eligibility criteria.

4.5.4 Overseas applicants who want to become .भारत Registrars need to be ICANN accredited Registrars. Existing .IN registrars are automatically accredited to be registrars for the . .भारत ccTLD. Existing Registrars may choose to take an OT&E test for each IDN TLD, if desired.

4.6 **Implementation Mechanism**

The implementation mechanism for IDN .भारत registration by the .IN Registry will be as under:

4.6.1 New Registrars (i.e., registrars who are not currently accredited for the .IN registry) appointed by the Registry will pay a onetime non-refundable entry fee of Rs. 50,000/-.

4.6.2 The new Registrars will, in addition, deposit a minimum amount of Rs. 25,000/- in their account with the Registry based on which they will be authorized to perform domain name transactions, and continue to do so as long as they have credit in their account with the Registry. Once the amount deposited is exhausted, they would automatically be disabled to perform transactions until they have replenished their account. The minimum amount for replenishment will be Rs. 25,000/-.

The registrar account will be common across both the ASCII name (.IN) and the IDN name(.भारत). This means that the registrar does not have to fund two separate accounts, rather he/she can simply utilize funds in one account with NIXI in order to register second level domains in the .भारत TLD.

4.6.3 The Registrars will be charged Rs. 350/- per domain name for 2nd level and Rs 250/- for 3rd level domain name by the Registry for registration valid for a period of one year. A Registrar may also register a domain name up to a

maximum of 10 years by paying the applicable registration amount of Rs. 3500/- or Rs 2500/- respectively to the .IN Registry.

4.6.4 The .IN Registry in consultation with the Government of India will review the **.भारत** domain name pricing structure as and when necessitated.

4.6.5 The Registrars, on the basis of their agreement with the Registry, will market and sell the **.भारत** domain names, and provide requisite services to the registrants using competitive pricing policy and best market practices.

4.6.6 The entire registration process will be online, including any document submission, and payment for registration. The **.भारत** domain name will be registered in near real time, on receipt of the request from the registrant (excepting Sunrise names), and the .IN Registry will put in place procedures to ensure that the Registrars do not unduly delay transmission of registration requests from the registrants to the Registrar.

4.6.7 The .IN Registry will have a 24/7 state-of-the-art technical infrastructure for **.भारत** domain name registration for maintenance of databases and providing requisite registration services in conjunction with the Registrars.

4.6.8 The .IN Registry will approach Government Departments, service organizations, businesses etc. to progressively adopt **.भारत** domain name by them for their websites and personnel.