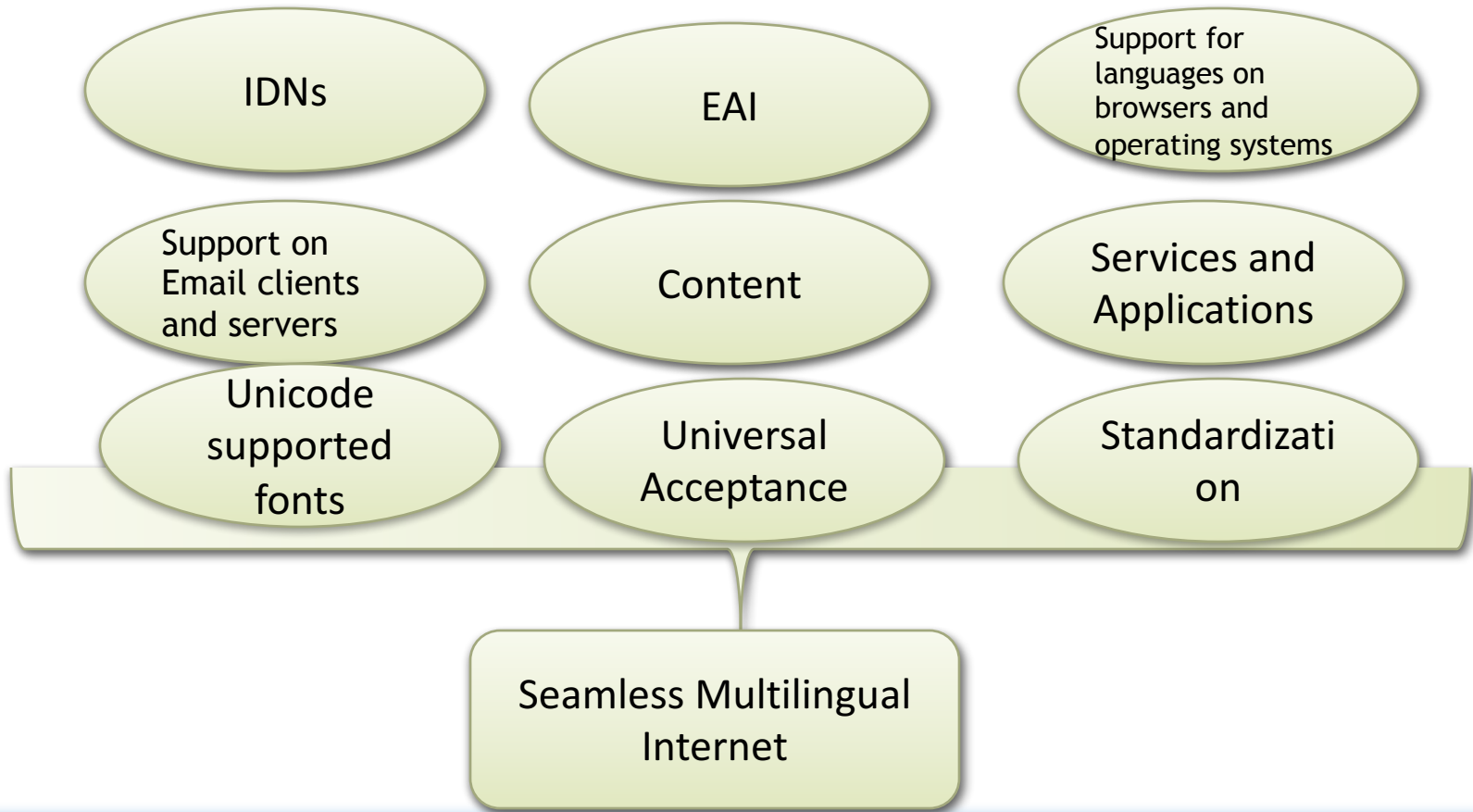


# Multilingual Internet: India Perspective & Relevance of EAI

# Multilingual Internet

- English is the dominant language on the web in terms of content, services and domain names.



# Positive Strides in India

- The Indus keyboard for Smartphones
  - It offers the auto-correction and the matra-prediction features in 12 languages.
  - These include English, Hindi, Marathi, Punjabi, Gujarati, Kannada, Bengali, Urdu, Telugu, Malayalam, Odia, Tamil and Assamese.
- Micromax has launched the smartphones like
  - Unite 4 and Unite 4 pro
  - The smartphones run Indus OS 2.0 and the service is available in more than 35 Micromax smartphones
- Lava
  - Domestic mobile brand has launched feature phone Lava KKT Ultra+Union which has support for 22 languages
- Panasonic
  - Recently launched P66 Mega which has support for 21 languages
- Intex launched Matrabhasha app
  - which is an onscreen virtual keyboard that supports input in 21 Indian languages including, Hindi, Urdu, Tamil, Bengali, Assamese, Punjabi, Gujarati, Sanskrit, Maithili, Marathi, Bodo, Santhali, Manipuri, Sindhi, Dogri, Konkani, Nepali, Kannada, Malayalam, Oriya and Telugu.
  - The app lets you store and search phonebook contacts in the chosen language and can also send text messages in a language of your choice. Now, all Intex smartphones are preloaded with Matrabhasha app

# Positive Strides in India

- DoT Directive - Deadline 1<sup>st</sup> July 2017
  - All handset manufacturers in the country have to support input in Hindi, English and one regional language. It must have support for display in 22 languages.
- Only known EAI service provider in India
  - Xgenplus
- Rediff is in the final stages of testing .bharat email service
  - Community free email service - <https://ईमेल.रीडिफ.भारत> is ready for use
  - Users on devices which have support for Indic language input (like iOS devices, certain android devices) can directly go to <https://ईमेल.रीडिफ.भारत> and register and use a @रीडिफ.भारत email id in Devnagri free of cost
  - Users who have devices that do not have Indic language input support can go to <http://bharat.rediff.com> and avail the same service
  - ईमेल.रीडिफ.भारत users can send emails to users having Latin or @.भारत email ids
  - Rediffmail is fully compatible with receiving and replying to emails from users having @.भारत email ids.
  - We are in the final stages of user acceptance testing of our iOS and Android apps for support of @.भारत email ids.

# Meetings convened by GoI along with NIXI to create awareness among the industry

- Is Government Aware of the Issue of UA?
  - Yes
  - As of now, no programme as such to become UA ready or track UA readiness. However, MeitY is sensitizing the other government departments and industries about this issue and planning to create a roadmap for achieving the same.
  - Series of Roundtable consultations conducted jointly by MeitY and NIXI in this regard (esp. promoting .bharat IDNs and EAI)
  - Many governmental services are available in regional languages (Input methods available)
- What is NIXI's stake?
  - Responsible for IDN ccTLDs
  - .bharat would have more takers if UA and EAI are a reality
  - Trend in IDN registration: Only over 11000 registrations so far
  - Major IDNs are accounted for by Marati and Hindi
- Registrars of .Bharat IDNs
  - 31 IDN Accredited Registrars (Indian and non-Indian)
  - Some registrars are aware of UA issue and lack of EAI
  - Data Infosys, Rediff, Mitsu etc are few who are aware
  - Few have lack of trust in how IDNs are going to work
  - Some are in IDN TLD space [eg: Netlynx (संगठन), Ascio Technologies, Suryanandan.net etc]

# Meetings convened by GoI along with NIXI to create awareness among the industry

- Highlights of Roundtable consultations conducted jointly by MeiTY and NIXI
  - Identifying the bottlenecks in implementing multilingual Internet in India
  - Thrust to UA and EAI
  - Participation from Industry ( Microsoft, Google, Rediff, Firefox)
  - TDIL, CDAC, NIC
  - UASG documents were referenced
  - UASG005 in Hindi
- Last June Meeting Outcome
  - Publishers need to be made aware about the use of unicode compliant fonts
  - How to resolve lack of trust among registrars and registrants for IDNs?
  - How to promote EAI for Indian languages? Is there any strategy?

# Meetings convened by GoI along with NIXI to create awareness among the industry (Cont..)

- Meeting in July with Email service providers and Browser Developers
  - At the time of the meeting, most of the common browsers were displaying IDN URL in Hindi properly without any effort or by changing the language settings on the system
  - But, EAI support was poor
  - Referenced UASG 007 (browser mistaking URL as search item)
- Meeting in August with Email service providers and Browser Developers
  - Industry positively responded ( Xgenplus, Rediff etc)
  - Some views included how to promote unicode standard for contents on websites?
  - How to adequately protect IDN based Email IDs from phishing and spoofing?

# Summary

- Given the linguistic diversity of India, EAI is important.
- I\* Community needs to be sensitized to deliver solutions. NIXI is planning a workshop during IGF 2016. Also, an Internet Draft has been published.
- Even though some have taken the lead to deliver, interoperability can't be overlooked



Thank You 😊

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