

# Support for Internationalized Email Addresses (EAI) in X.509 certificates

Alexey Melnikov <[alexey.melnikov@isode.com](mailto:alexey.melnikov@isode.com)>

[draft-ietf-pkix-eai-addresses-00.txt](#)

# Background

- EAI WG in the Applications Area is working toward completing rfc5335bis/rfc5336bis
  - rfc5336bis defines I18N email format as
    - <utf-8>@<utf-8> or <utf-8>@<ascii>
    - e.g. **Алексей.Мельников@ёлка.мойдомен.РФ**
- RFC 5280 defines rfc822Name subjectAltName choice for representing RFC 5322 email addresses, but that is not sufficient for the new format

# Open Issues

- Multiple aliases
  - for the left hand side of I18N emails
  - More importantly: multiple aliases for the IDN domains (especially due to IDN 2008)
    - ёлка.мойдомен.РФ
    - елка.мойдомен.РФ
  - **N left hand sides in M domains can make a certificate long**
- UTF8String X.509 type is not widely supported?

# Other relates tasks

- Update RFC 5280 to use IDNA2008 language?