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

Alexey Melnikov <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?