Application Evaluation Report Regarding IDN TLD (Version 1.0)

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Terminology

An U-Label is a domain label of Unicode characters, such as "пример" or "испытание".

An A-Label is a domain label in ASCII Compatible Encoding (Punycode) form, such as "xn--e1afmkfd" or "xn--80akhbyknj4f".

Table of results:

- S Successful
- PS Partially successful
- F Failed
- N No tested (the results of the previous test were failed)

Part 1. Web-browsers testing

The scenario of this test is to simulate behavior of average users who access web sites using web browsers by typing (copy-and-pasting), clicking on the bookmark or history, and clicking on the link.

Test case 1. Direct input to the address bar

Ν	Test case	Example
1	Write the domain name directly in the address	пример.испытание
	bar of the browser without protocol and sub	
	folder (U-label)	
2	Write the domain name directly in the address	http://пример.испытание
	bar of the browser with protocol and without	
	sub folder (U-label)	
3	Write the domain name directly in the address	http://пример.испытание/путь/
	bar of the browser with protocol and sub	
	folder (U-label)	
4	Write the domain name directly in the address	xne1afmkfd.xn80akhbyknj4f
	bar of the browser without protocol and sub	
	folder (A-label)	
5	Write the domain name directly in the address	http://xne1afmkfd.xn
	bar of the browser with protocol and without	80akhbyknj4f
	sub folder (A-label)	
6	Write the domain name directly in the address	http://xne1afmkfd.xn
	bar of the browser with protocol (A-label) and	80akhbyknj4f/путь
	sub folder (U-label)	

- a) Display of the URL in the address bar after accessing the URL was input:
 - > Access was successful and URL was displayed in U-Label (S)
 - > Access was successful and URL was displayed in A-label (PS)
 - Access failed (F)
- b) Save the URL in the bookmark or history after accessing the URL was input
 - > The URL saved in the bookmark or history was U-label (S)
 - > The URL saved in the bookmark or history was A-label (PS)
 - > The URL was not saved in the bookmark or history (F)
 - > No tested (the results of the previous test were failed) (N)
- c) Display of the URL in the address bar after clicking on the bookmark or history

- > Access was successful and URL was displayed in U-Label (S)
- Access was successful and URL was displayed in A-label (PS)
- > Access failed (F)
- > No tested (the results of the previous test were failed) (N)

Test case 2. Click on the link

Ν	Test case	Example
1	Click on the link without protocol and sub	пример.испытание
	folder (U-Label)	
2	Click on the link with protocol (U-Label)	http://пример.испытание
3	Click on the link with domain name with	http://пример.испытание/путь/
	protocol and sub folder (U-label)	
4	Click on the link with domain name with	http://xne1afmkfd.xn
	protocol (A-label)	80akhbyknj4f
5	Click on the link with domain name with	http://xne1afmkfd.xn
	protocol (A-label) and sub folder (U-label)	80akhbyknj4f/путь

- a) Display of the link in the status bar when cursor was on the link
 - > URL was displayed in U-Label (S)
 - URL was displayed in A-label (PS)
 - ➢ Not recognized as correct URL (F)
 - > The browser does not show a status bar (N)
- b) Display of the URL in the address bar after accessing the link
 - > Access was successful and URL was displayed in U-Label (S)
 - > Access was successful and URL was displayed in A-label (PS)
 - Access failed (F)
- c) Save of the URL in the bookmark or history after access the link
 - > The URL saved in the bookmark or history was U-label (S)
 - > The URL saved in the bookmark or history was A-label (PS)
 - > The URL was not saved in the bookmark or history (F)
 - > No tested (the results of the previous test were failed) (N)
- d) Display of the URL in the address bar after clicking on the bookmark or history
 - > Access was successful and URL was displayed in U-Label (S)
 - > Access was successful and URL was displayed in A-label (PS)
 - Access failed (F)
 - > No tested (the results of the previous test were failed) (N)

Table of tests results: Web-browsers

Browser	IE6	IE7	FireFox
Version	6.0.2900.2180.xpsp_ _sp2_gdr.070227-22-54	7.0.6001.18000	2.0.0.14
OS	Windows XP	Windows Vista	Windows XP

Test case 1. Direct input to the address bar

	а	b	С	а	b	С	а	b	С
1	F	N	N	S	S	S	S	S	PS
2	F	N	N	S	S	S	S	S	PS
3	F	N	N	S	S	S	S	S	PS
4	PS	PS	PS	S	S	S	S	S	PS
5	PS	PS	PS	S	S	S	S	S	PS
6	PS	PS	PS	S	S	S	S	S	PS

Test case 2. Click on the link

	а	b	С	d	а	b	С	d	а	b	С	d
1	F	Ν	Ν	Ν	F	Ν	Ν	Ν	F	Ν	Ν	Ν
2	S	F	Ν	Ν	S	S	S	S	PS	S	S	PS
3	S	F	Ν	Ν	S	S	S	S	PS	S	S	PS
4	PS	PS	PS	PS	S	S	S	S	S	S	S	PS
5	PS	PS	PS	PS	S	S	S	S	F	S	S	PS

Browser	Safari	Opera
Version	3.1.1 (527.17)	9.27
OS	Windows XP	Windows XP

Test case 1. Direct input to the address bar

	а	b	С	а	b	С
1	PS	PS	PS	S	S	S
2	PS	PS	PS	S	S	S
3	PS	PS	PS	S	S	S
4	PS	PS	PS	S	S	S
5	PS	PS	PS	S	S	S
6	PS	PS	PS	S	S	S

Test case 2. Click on the link

	а	b	С	d	а	b	С	d
1	F	Ν	Ν	Ν	F	Ν	Ν	Ν
2	Ν	PS	PS	PS	S	S	S	S
3	Ν	PS	PS	PS	S	S	S	S
4	Ν	PS	PS	PS	S	S	S	S
5	Ν	PS	PS	PS	S	S	S	S

Part 2. Mail clients testing

The scenario of this test is to simulate behavior of average users who read and write mail using mail clients by typing (copy-and-pasting), clicking on the address book of recipient's mail address, and clicking on the link of the received mail body.

Test case 1. Send e-mail

Ν	Test case	Example
1	Send e-mail to IDN TLD e-mail (U-label)	mailtest@пример.испытание
2	Send e-mail to IDN TLD e-mail (A-label.U-label))	mailtest@xne1afmkfd.испытание
3	Send e-mail to IDN TLD e-mail (A-label)	mailtest@xne1afmkfd.xn
		80akhbyknj4f

- a) Display the mail address in the "To" box after the mail was sent to the recipient
 - > Mail was successfully sent and recipient address was displayed in U-Label (S)
 - > Mail was successfully sent and recipient address was displayed in A-label (PS)
 - Mail sending failed (F)
- b) Display the mail address in the "From" box after receiving the response
 - > Sender address in "received" folder was displayed in U-Label (S)
 - Sender address in "received" folder was displayed in A-label (PS)
 - > No tested (the results of the previous test were failed) (N)
- c) Save the mail address in the address book after the mail was sent to the recipient
 - Saved address in the address book was U-label (S)
 - > Saved address in the address book was A-label (PS)
 - Mail address was not saved (F)
 - > No tested (the results of the previous test were failed) (N)
- d) Display the mail address in the "To" box of the composed mail when the mail address contained in the address book was clicked to compose a mail
 - > The address was displayed in U-Label (S)
 - > The address was displayed in A-Label (PS)
 - > No tested (the results of the previous test were failed) (N)

Test case 2. Click on a link in the received mail body

The URLs and mail addresses in the plain text mail body should be automatically turned into clickable links (as defined in RFC 3986, Appendix C).

N	Example
1	mailtest@пример.испытание
2	mailtest@xne1afmkfd.испытание
3	mailtest@xne1afmkfd.xn80akhbyknj4f
4	mailto: mailtest@пример.испытание
5	mailto:mailtest@xne1afmkfd.испытание
6	mailto:mailtest@xne1afmkfd.xn80akhbyknj4f
7	http://пример.испытание
8	http://xne1afmkfd.xn80akhbyknj4f
9	http://пример.испытание/путь
10	"mailtest@пример.испытание"
11	"mailtest@xne1afmkfd.испытание"
12	"mailtest@xne1afmkfd.xn80akhbyknj4f"
13	"mailto: mailtest@пример.испытание"
14	"mailto:mailtest@xne1afmkfd.испытание"
15	"mailto:mailtest@xne1afmkfd.xn80akhbyknj4f"
16	"http://пример.испытание"
17	"http://xne1afmkfd.xn80akhbyknj4f"
18	"http://пример.испытание/путь"
19	<mailtest@пример.испытание></mailtest@пример.испытание>
20	<mailtest@xne1afmkfd.испытание></mailtest@xne1afmkfd.испытание>
21	<mailtest@xne1afmkfd.xn80akhbyknj4f></mailtest@xne1afmkfd.xn80akhbyknj4f>
22	<mailto: mailtest@пример.испытание=""></mailto:>
23	<mailto:mailtest@xne1afmkfd.испытание></mailto:mailtest@xne1afmkfd.испытание>
24	<mailto:mailtest@xne1afmkfd.xn80akhbyknj4f></mailto:mailtest@xne1afmkfd.xn80akhbyknj4f>
25	<http: пример.испытание=""></http:>
26	<http: xne1afmkfd.xn80akhbyknj4f=""></http:>
27	<http: пример.испытание="" путь=""></http:>

- a) Display of the link in the pop-up window as well as status bar when cursor was on the link
 - > The URL or address was displayed in U-Label (S)
 - > The URL or address was displayed in A-Label (PS)
 - > Not recognized as correct URL or mail address (F)
 - > The Mail Client does not show a status bar (N)

- b) Display of the URL or mail address in the invoked application's address bar (web browser's address bar or mail client's "To" box) after accessing the URL or mail address
 - > Application invocation was successful and displayed URL or address was U-Label (S)
 - > Application invocation was successful and displayed URL or address was A-Label (PS)
 - > Application invocation failed or access to the URL failed (F)
 - > No tested (the results of the previous test were failed) (N)

Table of tests results: Mail clients

MailClient	Outlook Express	MicrosoftOutlook2007	The Bat
Version	6.00.2900.2180 (xpsp_sp2_rtm.040803-2158)	12.0.6300.5000 SP1 MSO (12.0.6213.1000)	4.0.24
Browser	IE7 (v. 7.0.6001.18000)	IE7 (v. 7.0.6001.18000)	IE7 (v. 7.0.6001.18000)
OS	Windows XP	Windows Vista	Windows XP

Test case 1. Send e-mail

	а	b	С	d	а	b	С	d	а	b	С	d
1	F	Ν	Ν	Ν	S	S	S	S	F	Ν	Ν	Ν
2	F	Ν	Ν	Ν	S	S	S	S	F	Ν	Ν	Ν
3	PS	PS	PS	PS	S	S	S	S	PS	PS	PS	PS

Test case 2. Click on a link in the received mail body

	а	b	а	b	а	b
1	S	F	S	F	F	N
2	PS	F	PS	F	F	N
3	PS	PS	PS	PS	F	N
4	S	F	S	F	Ν	S
5	PS	F	PS	F	Ν	PS
6	PS	PS	PS	PS	Ν	PS
7	S	F	S	S	Ν	F
8	PS	PS	PS	S	Ν	S
9	S	F	S	S	N	F
10	S	F	S	F	F	N
11	PS	F	PS	F	F	N
12	PS	PS	PS	PS	F	Ν
13	S	F	S	F	F	Ν
14	PS	F	PS	F	F	Ν
15	PS	PS	PS	PS	F	Ν
16	S	F	S	S	F	Ν
17	PS	PS	PS	S	F	Ν
18	S	F	S	S	F	Ν
19	S	F	S	F	F	Ν
20	PS	F	PS	F	F	Ν
21	PS	PS	PS	PS	F	Ν
22	S	F	S	F	Ν	S
23	PS	F	PS	F	Ν	PS
24	PS	PS	PS	PS	N	PS
25	S	F	S	S	Ν	F
26	PS	PS	PS	S	Ν	PS
27	S	F	S	S	N	F

MailClient	Gmail.Com	Yandex.Ru	Opera
Version			9.27
Browser	IE7 (v. 7.0.6001.18000)	IE7 (v. 7.0.6001.18000)	Opera 9.27
OS	Windows Vista	Windows Vista	Windows XP

Test case 1. Send e-mail

	а	b	С	d	а	b	С	d	а	b	С	d
1	F	Ν	Ν	Ν	F	Ν	Ν	Ν	S	S	S	S
2	F	Ν	Ν	Ν	F	Ν	Ν	Ν	F	Ν	Ν	Ν
3	PS	S	S	S	S							

Test case 2. Click on a link in the received mail body

	а	b	а	b	а	b
1	F	Ν	F	Ν	F	Ν
2	F	Ν	F	N	F	N
3	F	Ν	F	Ν	F	N
4	PS	S	F	N	S	S
5	PS	PS	F	N	PS	PS
6	PS	PS	F	N	PS	PS
7	S	S	F	Ν	S	S
8	S	S	S	S	S	S
9	S	S	F	Ν	S	S
10	F	Ν	F	Ν	F	Ν
11	F	Ν	F	Ν	F	Ν
12	F	Ν	F	Ν	F	Ν
13	PS	S	F	Ν	S	S
14	PS	S	F	Ν	PS	PS
15	PS	PS	F	Ν	PS	PS
16	S	S	F	Ν	S	S
17	S	S	S	S	S	S
18	S	S	F	Ν	S	S
19	F	Ν	F	Ν	F	Ν
20	F	Ν	F	Ν	F	Ν
21	F	Ν	F	Ν	F	Ν
22	F	S	F	Ν	S	S
23	F	S	F	Ν	PS	PS
24	PS	PS	F	N	PS	PS
25	S	S	F	Ν	S	S
26	S	S	S	S	S	S
27	S	S	F	Ν	S	S

MailClient	Mail.Ru	Rambler.Ru	Windows Mail
Version			
Browser	IE7 (v. 7.0.6001.18000)	IE7 (v. 7.0.6001.18000)	
OS	Windows Vista	Windows Vista	Windows Vista

Test case 1. Send e-mail

	а	b	С	d	а	b	С	d	а	b	С	d
1	F	Ν	Ν	Ν	F	Ν	Ν	Ν	F	Ν	Ν	Ν
2	F	Ν	Ν	Ν	F	Ν	Ν	Ν	F	Ν	Ν	Ν
3	PS	PS	F	Ν	PS							

Test case 2. Click on a link in the received mail body

				,		
	а	b	а	b	а	b
1	F	Ν	F	Ν	S	F
2	F	Ν	F	Ν	PS	F
3	PS	PS	PS	PS	PS	PS
4	F	Ν	F	Ν	S	F
5	F	N	F	Ν	PS	F
6	PS	PS	PS	PS	PS	PS
7	S	S	F	Ν	S	S
8	S	S	F	Ν	S	S
9	S	S	F	Ν	S	S
10	F	Ν	F	Ν	S	F
11	F	Ν	F	Ν	PS	F
12	PS	PS	PS	PS	PS	PS
13	F	Ν	F	Ν	S	F
14	F	N	F	Ν	PS	F
15	PS	PS	PS	PS	PS	PS
16	S	S	F	Ν	S	S
17	S	S	F	Ν	S	S
18	S	S	F	Ν	S	S
19	F	Ν	F	Ν	S	F
20	F	Ν	F	Ν	PS	F
21	PS	PS	PS	PS	PS	PS
22	F	Ν	F	Ν	S	F
23	F	Ν	F	Ν	PS	F
24	PS	PS	PS	PS	PS	PS
25	S	S	F	N	S	S
26	S	S	F	Ν	S	S
27	S	S	F	N	S	S