

नेपाल दूरसञ्चार प्राधिकरण
Nepal Telecommunications Authority

मोबाइल सेवाको गुणस्तर परीक्षण (ड्राइभ टेष्ट) प्रतिवेदन

काठमाण्डौ उपत्यका

२०७९ असार

Report on Quality Test (Drive Test) of Mobile Services

Kathmandu Valley

July 2022

१. परीक्षण अवधि

मिति २०७९ असार १२ देखि असार २२ सम्म।

A. Test Duration

From June 26th 2022 to July 6th 2022.

२. परीक्षण गरिएका नेटवर्कहरू

नेपाल दूरसञ्चार कम्पनी लिमिटेड (नेपाल टेलिकम)
एनसेल आजियटा लिमिटेड
स्मार्ट टेलिकम प्रा. लिमिटेड

B. Tested Networks

Nepal Telecom
Ncell Axiata Ltd.
Smart Telecom P. Ltd.

३. परीक्षणको विधि

ड्राइभ टेस्ट: यस विधिमा चलायमान सवारीसाधनमा जडान गरिएको परीक्षण उपकरणद्वारा लगातार फोनकल गरी वा डाटा प्रयोग गरी मोबाइल नेटवर्कको मुख्य मुख्य सेवा मानकहरूको तथ्यांक संकलन गरिन्छ।
कुनै एक स्थानमा उपलब्ध सबै सेवा प्रदायकहरूको गुणस्तर मापन समानान्तर रूपमा एकैसाथ गरिन्छ।
हरेक सेवा प्रदायकको कुनै एक स्थानमा उपलब्ध नेटवर्क (4G/ 3G/ 2G) मध्ये सर्वाधिक अनुकूल नेटवर्क स्वचालित रूपमा छनौट हुने गरी उपकरणमा व्यवस्था गरिन्छ।

Drive Test: It is a method in which testing tools mounted on a moving vehicle collect key performance indicators (KPIs) of the cellular network by repeatedly making voice or data calls.

All the available service providers at the location are tested simultaneously.

The tools are configured in a way so that a favorable network (4G/ 3G/ 2G) is selected for each service providers automatically as per availability.

Drive Test Tool: JDSU E6474A.

Post Processing Tool: Gladiator.

४. कल परीक्षण अवधि

(कल अवधि: १२० सेकेन्ड)
(सेवा प्रदायकको आफ्नै नेटवर्क भित्र लोकल कल गरिएको)

D. Call Test Duration

(Call Duration: 120 Seconds)
(Local Calls inside own network of the Service Provider)

५. कल परीक्षण गरिएको क्षेत्र :

टंगाल, हाँडीगाउँ, सानो गौचरण, बौद्ध, चाबहिल, गौरीघाट लगायतका क्षेत्रहरू र सो सँग जोडिएका मार्गहरू।

E. Call Test Area

Drive Test Area :Tangal, Handigaun, Sano Gaucharan, Baudha, Chabhil, Gaurighat etc. area and roads conneted to those areas

६. परीक्षणको नतिजा (Drive Test Results):

प्राधिकरणले काठमाण्डौ उपत्यकाका टंगाल, हाँडीगाउँ, सानो गौचरण, बौद्ध, चाबहिल, गौरीघाट लगायतका स्थानहरूमा मिति २०७९/०३/१२ देखि २०७९/०३/२२ गतेसम्म मोबाईल सेवाप्रदायकहरूको भ्वाईस तथा डाटा सेवाको गुणस्तर परीक्षण गरि प्राप्त नतिजालाई यस प्रतिवेदनमा प्रस्तुत गरिएको छ।

(The report presents quality of the voice and data service of mobile service providers obtained by conducting Drive Test from 2079/03/12 to 2079/03/22 B.S. in the area of Tangal, Handigaun, Sano Gaucharan, Bouddha, Chabhil, Gaurighat area of Kathmandu Valley.)

डाईभ टेष्टको नतिजा

मोबाईल सेवाप्रदायक : नेपाल दूरसंचार कम्पनी लि.

CALL TEST REPORT

OPERATOR INFORMATION

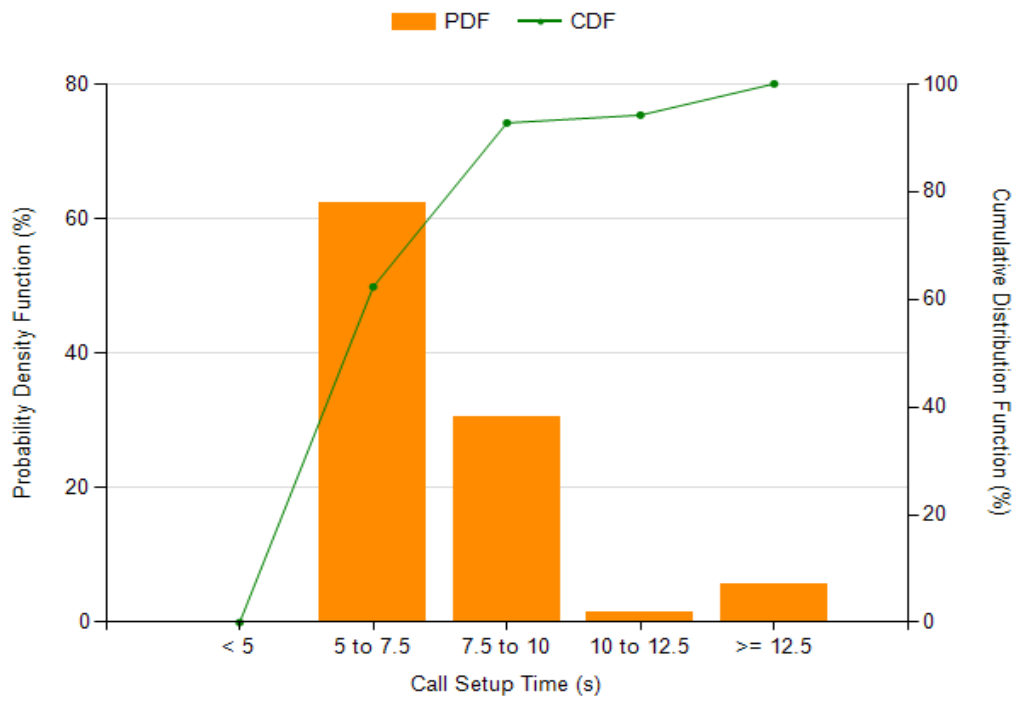
Device Label	Mobile Country Code (MCC)	Mobile Network Code (MNC)
NDCL	429	1

CALL SETUP SUCCESS RATE

Call Setup Success Rate		
Total Attempts	Established Calls	Call Setup Success Rate (%)
70	67	95.71

CALL SETUP TIME

Call Setup/Connection Time			
Setup Time (s)	Standard Deviation (s)	Minimum (s)	Maximum (s)
7.27	1.92	5.09	13.47



CALL BLOCK RATE

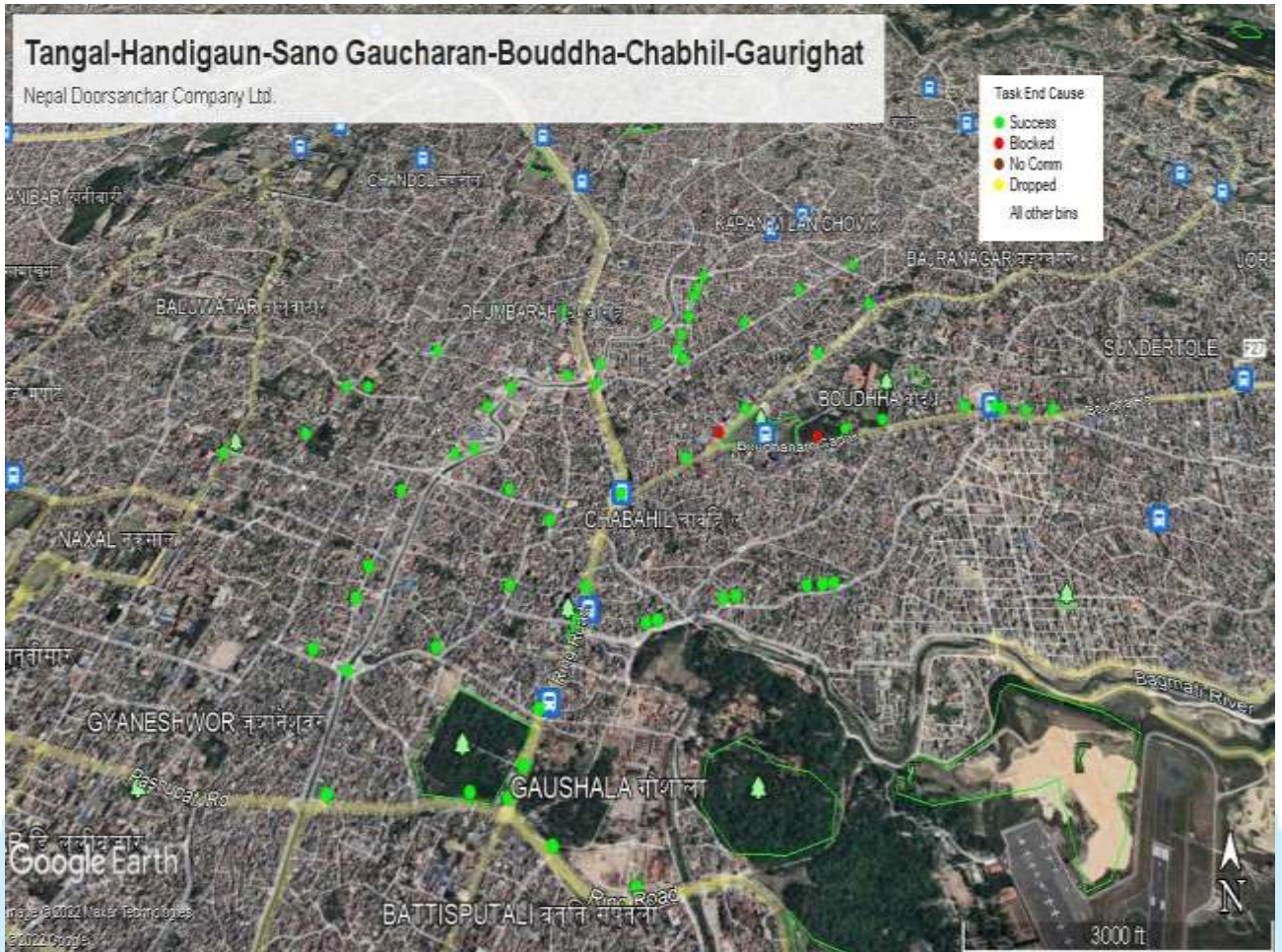
Call Block Rate			
Attempted Calls	Established Calls	Blocked Calls	Call Block Rate (%)
70	67	3	4.29

CALL DROP RATE

Call Drop Rate			
Total Attempts	Established Calls	Dropped Calls	Call Drop Rate (%)
70	67	0	0

Tangal-Handigaun-Sano Gaucharan-Bouddha-Chabhil-Gaurighat

Nepal Doorsanchar Company Ltd.



DATA TEST REPORT

PING ROUND TRIP TIME

Ping Round Trip Time			
Ping RTT (ms)	Standard Deviation (s)	Minimum (s)	Maximum (s)
90.8	20.51	75	196

HTTP SUCCESS RATE

HTTP Display Success Rate		
Total HTTP Attempts	Total HTTP Success	Success Rate
50	45	90

HTTP BROWSING DELAY

HTTP Browsing Time			
HTTP Browsing Delay (s)	Standard Deviation (s)	Minimum (s)	Maximum (s)
32.34	25.03	3.62	114.82

मोबाईल सेवाप्रदायक : एनसेल आजियटा लि.

CALL TEST REPORT

OPERATOR INFORMATION

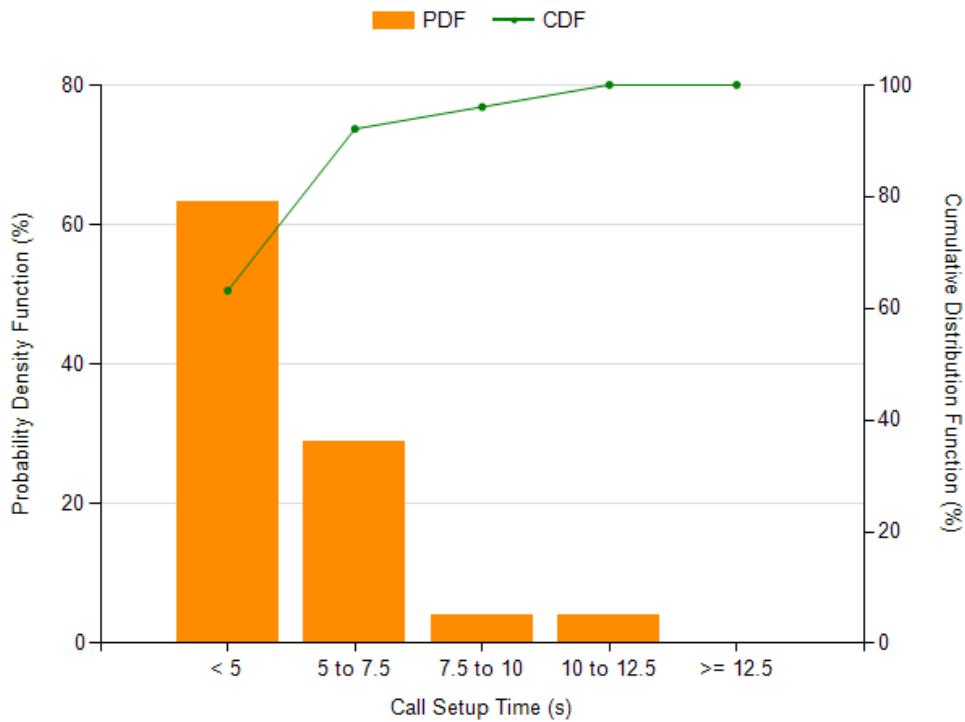
Device Label	Mobile Country Code (MCC)	Mobile Network Code (MNC)
NCELL	429	2

CALL SETUP SUCCESS RATE

Call Setup Success Rate		
Total Attempts	Established Calls	Call Setup Success Rate (%)
75	75	100

CALL SETUP TIME

Call Setup/Connection Time			
Setup Time (s)	Standard Deviation (s)	Minimum (s)	Maximum (s)
5.13	1.59	3.8	11.44



CALL BLOCK RATE

Call Block Rate			
Attempted Calls	Established Calls	Blocked Calls	Call Block Rate (%)
75	75	0	0

CALL DROP RATE

Call Drop Rate			
Total Attempts	Established Calls	Dropped Calls	Call Drop Rate (%)
75	75	0	0



DATA TEST REPORT

PING ROUND TRIP TIME

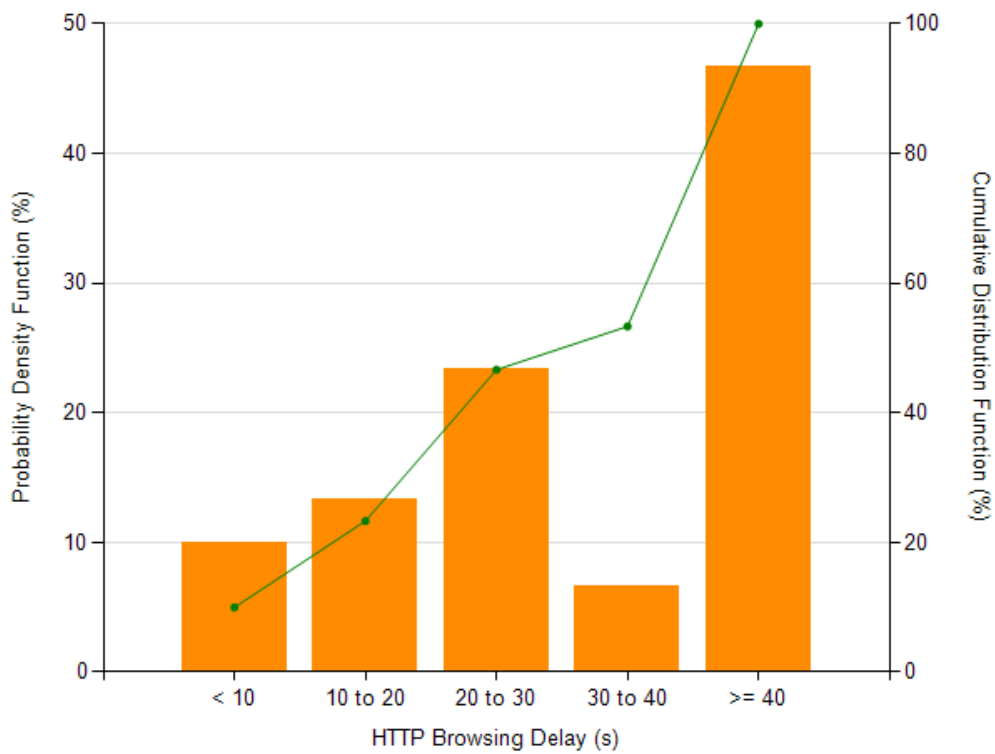
Ping Round Trip Time			
Ping RTT (ms)	Standard Deviation (s)	Minimum (s)	Maximum (s)
195.89	383.04	70	1945

HTTP SUCCESS RATE

HTTP Display Success Rate		
Total HTTP Attempts	Total HTTP Success	Success Rate
35	30	85.71

HTTP BROWSING DELAY

HTTP Browsing Time			
HTTP Browsing Delay (s)	Standard Deviation (s)	Minimum (s)	Maximum (s)
41.5	28.63	4.09	109.12





मोबाईल सेवाप्रदायक : स्मार्ट टेलिकम प्रा. लि.

CALL TEST REPORT

OPERATOR INFORMATION

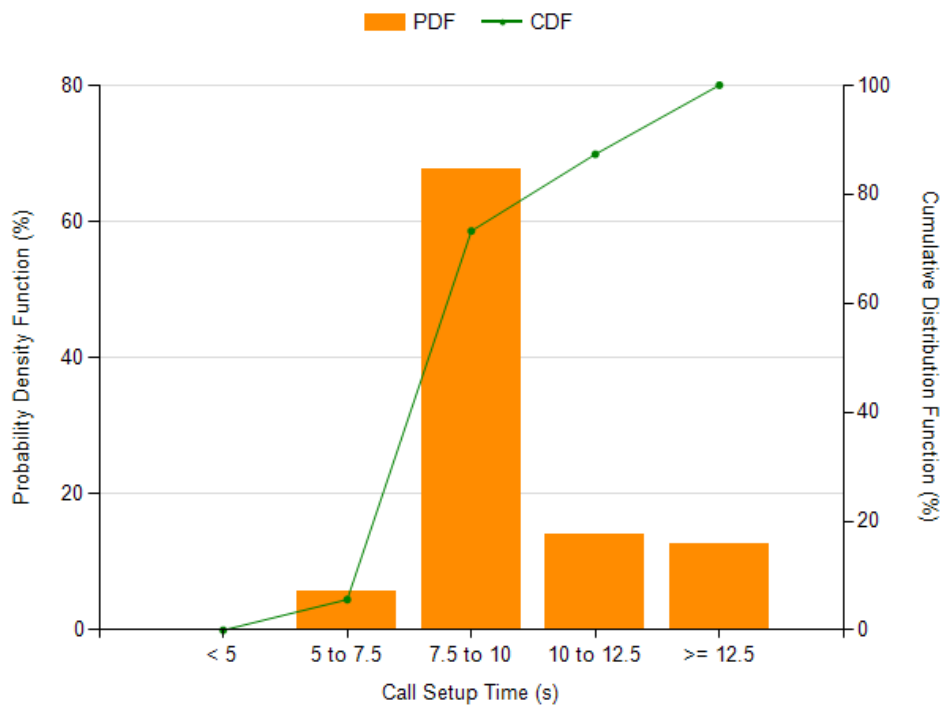
Device Label	Mobile Country Code (MCC)	Mobile Network Code (MNC)
SMART	429	4

CALL SETUP SUCCESS RATE

Call Setup Success Rate		
Total Attempts	Established Calls	Call Setup Success Rate (%)
73	69	94.52

CALL SETUP TIME

Call Setup/Connection Time			
Setup Time (s)	Standard Deviation (s)	Minimum (s)	Maximum (s)
9.3	2.21	6.36	16.43



CALL BLOCK RATE

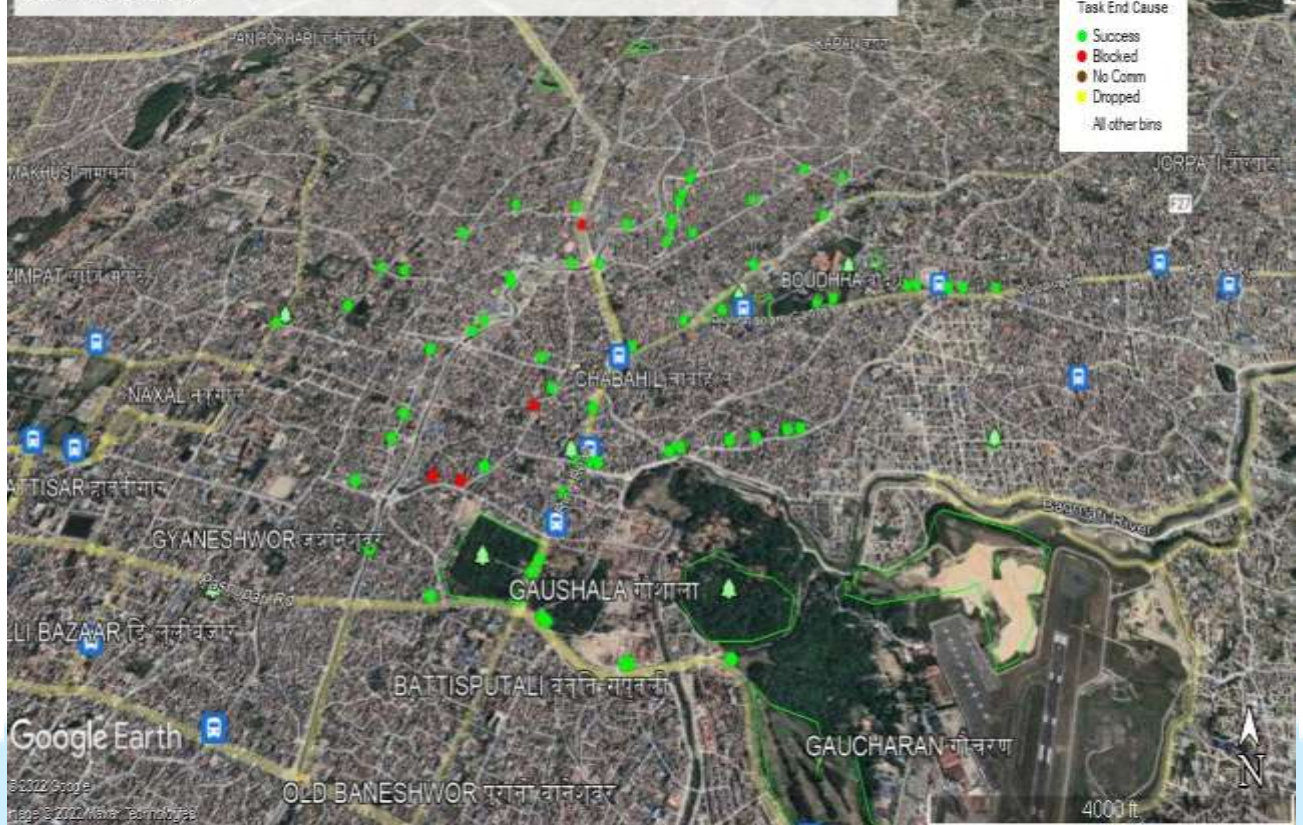
Call Block Rate			
Attempted Calls	Established Calls	Blocked Calls	Call Block Rate (%)
73	69	4	5.48

CALL DROP RATE

Call Drop Rate			
Total Attempts	Established Calls	Dropped Calls	Call Drop Rate (%)
73	69	0	0

Tangal-Handigaun-Sano Gaucharan-Bouddha-Chabhil-Gaurighat

Smart Telecom Pvt. Ltd.



DATA TEST REPORT

PING ROUND TRIP TIME

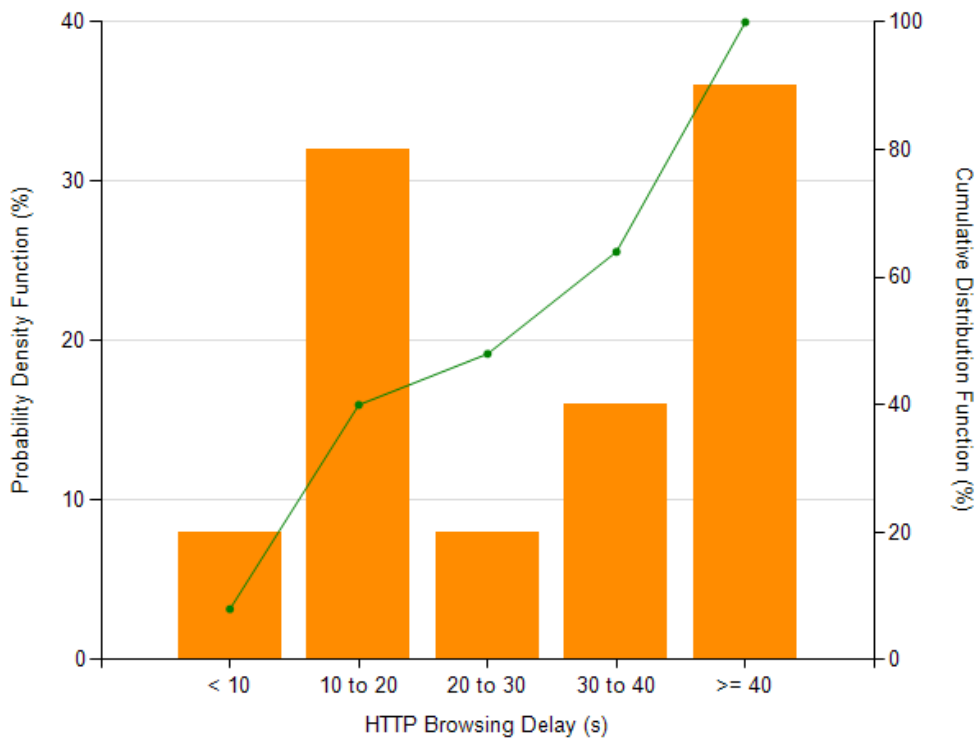
Ping Round Trip Time			
Ping RTT (ms)	Standard Deviation (s)	Minimum (s)	Maximum (s)
172.93	444.48	60	2438

HTTP SUCCESS RATE

HTTP Display Success Rate		
Total HTTP Attempts	Total HTTP Success	Success Rate
33	25	75.76

HTTP BROWSING DELAY

HTTP Browsing Time			
HTTP Browsing Delay (s)	Standard Deviation (s)	Minimum (s)	Maximum (s)
35.03	25.52	1.54	103.46



७. निष्कर्ष :

मिति २०७९/०३/१२ देखि २०७९/०३/२२ गते सम्म काठमाण्डौ उपत्यकाका विभिन्न स्थानहरूमा गरिएको भ्वाईस तथा डाटा सेवाको गुणस्तर परीक्षणको नतिजा सारांशरूपमा देहायको तालिकामा प्रस्तुत गरिएको छ ।

Date		From 2079/03/12 To 2079/03/22			
Drive Test Area		Tangal, Handigaun, Sano Gaucharan, Bauddha, Chabhil, Gaurighat etc. area and roads conneted to those areas			
Telecom Service Provider		NDCL	NCELL	SMART	
Test Name	Key Performance Indicator	NTA Threshold			
Voice	Call Setup Success Rate	>=99.99%	95.71	100	94.52
	Call Setup Time	< =5 sec	7.27	5.13	9.3
	Grade of Service(Call Block Rate)	<=2%	4.29	0	5.48
	Call Drop Rate	<=2%	0	0	0
Data	Ping 32bytes RTT (Round Trip Time)	250 ms	90.8	195.89	172.93
	HTTP Browsing Display Success Rate	%	90	85.71	75.76
	Average HTTP Browsing Display Delay	s	32.24	41.5	35.03

Note: NTA=Nepal Telecommunications Authority ;
 NDCL= Nepal Doorsanchar Company Ltd. ;
 NCELL= Ncell Axiata Ltd. ;
 SMART=Smart Telecom Pvt. Ltd.

Complied		Not Complied		Not Set	
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द. टिप्पणीहरू

प्रस्तुत तथ्यांकले उल्लेखित मितिमा उल्लेखित स्थानहरूमा उपलब्ध मोबाइल नेटवर्कहरूको अवस्थालाई इन्डिकत गर्छ, अन्य स्थानहरूमा उपलब्ध मोबाइल नेटवर्कहरूको अवस्था फरक हुन सक्छ।

विस्तृत जानकारीको लागि

सेवा गुणस्तर स्तरीकरण शाखा
नेपाल दूरसञ्चार प्राधिकरण
जमल, काठमाडौं
जी. पी. ओ. बक्स: ९७५४
फोन नं.: ९७७-१-५३५५४७४
फ्याक्स: ९७७-१-५३५५२५०
इमेल: ntra@nta.gov.np
वेबसाइट: www.nta.gov.np

F. Remarks

Statistics Presented above represent the network conditions of the operators on the specified places during the period of Drive Test, the network conditions on other areas can differ.

For Detailed Information

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