

ORPA_ROA_CLARO_001-2022	ACORDO DE ROAMING AUTOMÁTICO NACIONAL CLARO	
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Anexo 7 - Caderno de Testes Voz IR24



Claro GPRS Checklist



GPRS Information	
APN Operator Identifier:	mnc005.mcc724.gprs
DNS IP address & name (primary):	201.23.188.12/DNSRJ01.mnc005.mcc724.gprs
	201.23.173.12/DNSSM01.mnc005.mcc724.gprs
DNS IP address & name (secondary):	201.23.188.44/ DNSRJ02.mnc005.mcc724.gprs
	201.23.173.44/ DNSSM02.mnc005.mcc724.gprs
Inter PLMN GSN Backbone IP address range(s):	200.169.127.0/27
	201.23.160.96/27
	201.23.164.0/26
	201.23.164.64/26
	201.23.165.0/26
	201.23.165.64/29
	201.23.165.128/28
	201.23.165.192/26
	201.23.166.0 /27
	201.23.170.64/29
	201.23.170.128/28
	201.23.170.144/28
	201.23.170.192/29
	201.23.171.0/26
	201.23.171.64/29
	201.23.171.128/28
	201.23.171.192/26
	201.23.173.0/26
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	201.23.174.0/26
	201.23.174.64/29
	201.23.174.128/28
	201.23.174.192/26
	201.23.175.0/27
	201.23.182.32/28
	201.23.182.64/29
	201.23.182.80/29
	201.23.182.128/28
	201.23.182.144/28
	201.23.182.192/29
	201.23.183.0/26
	201.23.183.128/26
	201.23.187.0/27
	201.23.187.32/27
	201.23.187.64/27
	201.23.187.96/27
	201.23.187.128/27
	201.23.187.160/27
	201.23.187.224/27
	201.23.187.192/27
	201.23.188.0/26
	201.23.188.96/28
	201.23.191.64/29
	201.23.191.128/28
	201.23.191.144/28
201.23.191.192/29	
201.23.189.0/24	
201.23.183.192/26	
201.23.175.64/27	
201.23.175.96/27	
201.23.175.128/27	
201.23.183.64/27	
201.23.183.96/27	
201.23.191.0/26	

Coversheet

Autonomous System Number:	22085
Used GRX operator(s):	France Telecom & Aicent claro.com.br
List of APN's available for testing:	bandalarga.claro.com.br
	java.claro.com.br
	streaming.claro.com.br
	blackberry.net
	poc.claro.com.br
GTP Version	1
Vendor information SW/HW version for core NW (SGSN, GGSN, HLR): (optional field)	Ericsson & Nokia

APN Details	
Java	
APN	java.claro.com.br
VPLMNACC	no
Username	claro
Password	claro
Internet	
APN	claro.com.br
VPLMNACC	no
Username	claro
Password	claro
MMS	
APN	mms.claro.com.br
VPLMNACC	no
Username	claro
Password	claro
MMS gateway IP address	200.169.126.10
Port primary /secondary	WAP 1.0: 9200/9201/9202/9203 or WAP 2.0: 8799
Homepage	http://mms.claro.com.br
WAP	
APN	wap.claro.com.br
VPLMNACC	no
Username	claro
Password	claro
WAP Gateway IP address	200.169.126.11
Port primary /secondary	WAP 1.0: 9200/9201/9202/9203 or WAP 2.0: 8799
Homepage	http://wap.claro.com.br
Streaming	
APN	streaming.claro.com.br
VPLMNACC	no
Username	claro
Password	claro



APPENDIX A

IREG GPRS Test Results for Mobile Stations of HPLMN(a) Roaming to VPLMN(b)



A.1.1 Roaming Scenario to be Tested

HPLMN(a)	VPLMN(b)	
GPRS R97/98	GPRS R97/98	<input checked="" type="checkbox"/>
GPRS R99/UMTS	GPRS R97/98	<input type="checkbox"/>
GPRS R97/98	GPRS R99/UMTS	<input type="checkbox"/>
GPRS R99/UMTS	GPRS R99/UMTS	<input type="checkbox"/>

A.1.2 Network Operator Information

HPLMN (a)	CLARO - BRAZIL
VPLMN (b)	
Date of Tests	
Testing personnel PLMN(a)	
Tel/Fax:	
E-mail:	
Testing personnel PLMN(b)	
Tel/Fax:	
E-mail:	
HLR Identity/Identities	see IR21
HLR Manufacturer(s)	ERICSSON
HLR Software Build Level(s)	R10
Anexo 7 - Caderno de Testes Voz IR24	
SGSN Identity/Identities	
SGSN Manufacturer(s)	
SGSN Software Build Level(s)	
GGSN Identity/Identities	200.169.127.49 / 200.169.124.49
H-GGSN Manufacturer(s)	NORTEL
H-GGSN Software Build Level(s)	GPRS 5.0
SMS-SC Identity / Identities	see IR21
SMS-SC Manufacturer(s)	see IR21
SMS-SC Software Build Level(s)	see IR21
MMSC Identity / Identities	see IR21
MMSC Manufacturer(s)	see IR21
MMSC Software Build Level(s)	see IR21
Comments	



A 2 1 1
A 2.1. BASIC TEST RESULTS
A 2.1.1 GPRS-Attach of MS1(a) in VPLMN(b) (GPRS Attach only)



MSC/VLR Record contents:

- (a) MSISDN
- (b) IMSI
- (c) HLR E.164 address

SGSN Record contents:

- (d) MSISDN
- (e) IMSI
- (f) MM State
- (g) SGSN Address
- (h) Comments

Test case Result

Signature c Anexo 7 - 0

Date

Time



A 2 2 1
GPRS PDP Context Activation by MS1(a) in VPLMN(b)
 (user provides Network-ID and no Operator-ID and is not allowed to use [dropdown] SSN)
 A 2.2.1 Intranet access of MS1(a) in VPLMN(b) using home GGSN
 Expected Result :The tunnel shall be opened and the application work successfully



(a)	MSISDN of originating MS (i.e.MS1(a))	<input type="text"/>	-	<input type="text"/>
(b)	Access Point Name keyed into MS1(a)	<input type="text" value="wap.claro.com.br"/>	-	<input type="text"/>
(c)	MS type & software used	<input type="text"/>		
(d)	Time of PDP-context activation	<input type="text"/>	hr/min/sec	
(e)	Application usage successful ?	<input type="text"/>	-	<input type="text"/>
(f)	Time of PDP-context deactivation	<input type="text"/>	hr/min/sec	<input type="text"/>
(g)	Overall duration of context	<input type="text"/>	hr/min/sec	
(h)	Total Data Sent during context	<input type="text"/>	bytes	
(i)	Total Data Received during context	<input type="text"/>	bytes	
(j)	IP address assigned	<input type="text"/>		
(k)	Comments	<input type="text"/>		

Test case | Anexo 7 - Caderno de Testes Voz IR24

Signature of Tester

Date



A 2 2 4 - A
ISP/Internet access of MS1(a) in VPLMN(b) using home GGSN
 (user provides Network-ID and no Operator-ID and is not allowed to use visited GGSN)
 Expected Result :The tunnel shall be opened and the application work successfully



(a)	MSISDN of originating MS (i.e.MS1(a))	<input type="text"/>
(b)	Access Point Name keyed into MS1(a)	<input type="text" value="claro.com.br"/>
(c)	MS type & software used	<input type="text"/>
(d)	Time of PDP-context activation	<input type="text"/> <input checked="" type="checkbox"/> hr/min/sec <input checked="" type="checkbox"/>
(e)	Application usage successful ?	<input type="text"/> <input checked="" type="checkbox"/>
(f)	Time of PDP-context deactivation	<input type="text"/> hr/min/sec
(g)	Overall duration of context	<input type="text"/> <input checked="" type="checkbox"/> hr/min/sec
(h)	Total Data Sent during context	<input type="text"/> <input checked="" type="checkbox"/> bytes
(i)	Total Data Received during context	<input type="text"/> <input checked="" type="checkbox"/> bytes
(j)	IP address assigned	<input type="text"/> <input checked="" type="checkbox"/>
(k)	Comments	<input type="text"/>

Test case Result

Anexo 7 - Caderno de Testes Voz IR24

Signature of Tester

Date



A 2 2 4 - B
ISP/Internet access of MS1(a) in VPLMN(b) using home GGSN
 (user provides Network-ID and no Operator-ID and is not allowed to use visited GGSN)
 Expected Result :The tunnel shall be opened and the application work successfully



(a)	MSISDN of originating MS (i.e.MS1(a))	<input type="text"/>
(b)	Access Point Name keyed into MS1(a)	<input type="text" value="java.claro.com.br"/>
(c)	MS type & software used	<input type="text"/>
(d)	Time of PDP-context activation	<input type="text"/> hr/min/sec
(e)	Application usage successful ?	<input type="text"/>
(f)	Time of PDP-context deactivation	<input type="text"/> hr/min/sec
(g)	Overall duration of context	<input type="text"/> hr/min/sec
(h)	Total Data Sent during context	<input type="text"/> bytes <input type="text"/>
(i)	Total Data Received during context	<input type="text"/> bytes <input type="text"/>
(j)	IP address assigned	<input type="text"/>
(k)	Comments	<input type="text" value="Optional"/>

Test case Result

Anexo 7 - Caderno de Testes Voz IR24

Signature of Tester Date

No

No



A 2 4
Operator Control of Service



A 2.4.1 Location cancellation for MS1(a)-Subscription held in VPLMN(b)

SGSN Record contents prior to cancellation ?

(a) MSISDN

(b) IMSI

(c) SGSN Record Erased

(d) GGSN(a) or GGSN (b) record erased?

(e) PDP context deactivation successful? Good

(f) Time delay between HLR deleting subscription and SGSN erasing record No seconds.

(g) Comments

Test case Result

Signature of Tester Date

Time

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A 2.4.2 Operator Determined Barring for all MS init PDP context activations of MS1(a)PLMN(b)

(a) MSISDN of MS₁(a)

(b) Operator performed barring towards PDP-context activation from HL

(c) SGSN record contains barring tags

(d) Perform PDP-context activation from MS₁(a). Is it successful?

(e) Comments

Test case Result

Signature of Tester Date

Time



B 2.4.1
MMS Roaming: Mobile originated and terminated MMS (MS1(a) / MS2(a))
 Send MO/MT Multimedia message (max. 30 kB) including picture/image / voice/audio / text



	Access Point Name keyed into MS1(a) and MS1(b)	<input type="text" value="mms.claro.com.br"/>
(a)	MSISDN of MS1	<input type="text"/>
(b)	IMSI of MS1	<input type="text"/>
(c)	MSISDN of MS2	<input type="text"/>
(d)	IMSI of MS2	<input type="text"/>
(e)	Time of transmitting to MMSC	<input type="text"/> hr/min/sec <input type="button" value="v"/>
(f)	Amount of data sent	<input type="text"/> bytes <input type="button" value="v"/>
(g)	Amount of data received	<input type="text"/> bytes <input type="button" value="No"/> <input type="button" value="v"/>
(h)	Time of notification receipt of MMS at MS2	<input type="text"/> Good <input type="button" value="v"/>
(i)	Time of message receipt of MMS at MS2	<input type="text"/> hr/min/sec <input type="button" value="No"/> <input type="button" value="v"/>
(j)	Amount of data sent	<input type="text"/> bytes <input type="button" value="-"/> <input type="button" value="v"/>
(k)	Amount of data received	<input type="text"/> bytes
(l)	MS type & software used	<input type="text"/>
	Anexo 7 - Caderno de Testes Voz IR24	
(m)	Was message correctly received?	<input type="button" value="v"/>
(n)	Comments	<input type="text"/>
	Test case Result	<input type="text"/> <input type="button" value="v"/>
	Signature of Tester	<input type="text"/> Date <input type="text"/>
	Expected Result	<input type="text" value="MS1(b) sends the message without error messages and MS2(a) receives the notification and fetches the message correctly. If case delivery report is used, the delivery report should be successfully received."/>



APPENDIX C



Completion Certificate for IREG GRPS Testing for Inter-PLMN Roaming

Completion Certificate for MoU-IREGGRPS Testing for Inter-PLMN Roaming

This certificate confirms the successful completion of mandatory MoU-IREG-GPRS Tests for Mobile

Subscribers of PLMN (a) visiting PLMN (b)

The roaming case tested was :

HPLMN(a)	VPLMN(b)	
GPRS R97/98	GPRS R97/98	<input checked="" type="checkbox"/>
GPRS R99/UMTS	GPRS R97/98	<input type="checkbox"/>
GPRS R97/98	GPRS R99/UMTS	<input type="checkbox"/>
GPRS R99/UMTS	GPRS R99/UMTS	<input type="checkbox"/>

The Services tested were:-

- GPRS attach only
- GPRS PDP context activation
- Operator Control of Service

Other comments

The tests were completed on (date)

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The testing team in PLMN (b)

were:

The testing team in PLMN (a)

were:

Signed Date

of PLMN (b)

Signed Date

of PLMN (a)

End Of Appendix C

A 2.1.6. PSTN TELEPHONE(B) CALLS MS(A) ROAMED TO COUNTRY(B) - NO RESPONSE TO PAGING.

(a) Directory Number of calling PSTN telephone(b)

(b) Number dialled by PSTN Telephone(b)

(c) Time of start of call (i.e. last digit dialled) hr/min/sec

(d) Time of start of "not reachable" announcement hr/min/sec

(e) Duration of announcement secs

(f) Language of announcement

(g) Text of announcement

(h) Comments

(i) Testcase Result

Signature of Tester Date

A 2.2. SUPPLEMENTARY SERVICE TEST RESULTS

A 2.2.1. BARRING OF ALL OUTGOING CALLS.[BAOC]

(a) MSISDN of MS(a)

(b) Time of activation of BAOc hr/min/sec

(c) Emergency code keyed [i.e.112]

(d) Time of start of emergency call (i.e. SEND key operation) hr/min/sec

*(e) Time of perceived answer of call hr/min/sec

*(f) Chargable Call Duration (i.e. perceived answer until end of call) secs
(To be measured irrespective of charging policy for emergency calls in VPLMN)

(g) Emergency Call successful ? ▼

(h) PSTN number keyed

(i) PSTN call successful ? ▼

(j) Time of deactivation of BAOc hr/min/sec

(k) Comments

(l) Testcase Result ▼

Signature of Tester

Date

A 2.2.2. BARRING OF OUTGOING INTERNATIONAL CALLS.[BOIC]

(a) MSISDN of MS(a)

(b) Time of activation of BOIC hr/min/sec

(c) Operator Service number or PSTN(b) number keyed

(d) Time of start of national PSTN call (i.e. SEND key operation) hr/min/sec

(e) Delay between SEND key operation and MS(a) receiving alerting indication secs

* (f) Time of perceived answer of call hr/min/sec

* (g) Chargable Call Duration (i.e. perceived answer until end of call) secs

(h) Call routed to correct Operator position? ▼

(i) Home PLMN Country number keyed

(j) Home PLMN Country call successful ? ▼

(k) Time of deactivation of BOIC hr/min/sec

(l) Comments

(m) Testcase Result ▼

Signature of Tester Date

A 2.2.3. BARRING OF OUTGOING INTERNATIONAL CALLS EXCEPT TO HOME PLMN COUNTRY. [BOIC-EXHC]

I) General:

- (a) Method of Supplementary Service Configuration [MS User/HLR operator] ▼
- (b) Does the switch support the SS:BOICexHC? ▼
- (c) MSISDN of MS(a)

II) Split into different cases if VPLMN(b) supports (i.e.A) or does not support (i.e.B) the SS:BOICexHC.

A) Activated Service is BOICexHC (VPLMN supports SS:BOICexHC)

hr/min/sec

A.1) Call to Home-PSTN-telephone(a):

- (d) Home PSTN Country number keyed
- (e) Time of start of Home PSTN Country call (i.e. SEND key operation) hr/min/sec
- *(f) Time of perceived answer of call hr/min/sec
- *(g) Home PSTN Country call Chargable Call Duration (i.e. perceived answer until end of call) secs

A.2) Call to country where the MS is presently located:

- (h) PSTN number of the country keyed, where MS(a) is presently located
- (i) Time of start of call within the country where the MS(a) is presently located (i.e. SEND key operation) hr/min/sec
- *(j) Time of perceived answer of call hr/min/sec
- *(k) Chargable call duration, to the country where the MS(a) is presently located (i.e. perceived answer until end of call) secs

A.3) International Call, not to Home PLMN country and not to country where the MS is presently located:

- (l) International (Non Home PLMN Country and non country where MS(a) is presently located) number keyed
- (m) International (Non Home PLMN Country and non country where MS(a) is presently located) call successful ? ▼

A 2.2.3

(n) Time of deactivation of BOICexHC hr/min/sec

B) Activated Service is BOICexHC (VPLMN does not support SS:BOICexHC):

B.1) Call to country where the MS is presently located:

(o) PSTN number keyed

(p) Time of start of national PSTN call (i.e. SEND key operation) hr/min/sec

(q) Time of perceived answer of call hr/min/sec

(r) PSTN Chargable Call Duration (i.e. perceived answer until end of call) secs

B.2) Call to Home-PSTN-telephone(a):

(s) Home PSTN Country number keyed

(t) Home PSTN Country call successful ? -

III) Results of this testcase and comments:

(u) Comments

(v) Testcase Result

Signature of Tester

Date

A 2.2.4 BARRING OF ALL INCOMING CALLS [BAIC / BAICROAMING]

(a) MSISDN MS(a)

(b) Time of activation of [BAIC / BAICroaming] hr/min/sec

(c) PSTN number

(d) Number keyed by PSTN

(e) Call successful ? ▼

(f) Time of deactivation of [BAIC/BAICroaming] hr/min/sec

(g) Comments

(h) Testcase Result ▼

Signature of Tester Date

A 2.2.6. CALL FORWARDING ON NOT REACHABLE (AFTER IMSI DETACH, SWITCH THE PHONE OFF).[CFNRC]

- (a) MSISDN of MS(a1)
- (b) Time of activation of CFNRC hr/min/sec
- (c) DN of calling PSTN telephone(b2)
- (d) DN of forwarded - to - PSTN telephone(a1). Note 1
- (e) Time of start of call hr/min/sec
- (f) Delay between dialling last digit of MSISDN of MS(a1) at PSTN telephone(b2) and PSTN telephone(a1) ringing. Note 1 secs
- * (g) Time of perceived answer of call hr/min/sec
- * (h) Chargable Call Duration (i.e. perceived answer until end of call) secs
- (i) Was an announcement that call was - being - forwarded received by PSTN telephone(b2)? ▼
- (j) Language of announcement [If applicable]
- (k) Text of announcement [If applicable]

CF is not available for our customers in roaming.

- (l) Quality of call [Excellent, Good, Fair, Poor, Bad] ▼
- (m) Echo present? ▼
 If Yes, to which party? [caller/called] ▼
- (n) Time of deactivation of CFNRC hr/min/sec
- (o) Comments

Note 1. If forwarding to PSTN telephone (b1) is restricted by HPLMN or VPLMN, then use MS(a2).
 If MS(a2) cannot be used then choose PSTN telephone (a)

- (p) Testcase Result ▼
- Signature of Tester Date

A 2.2.7. CALL FORWARDING ON BUSY.[CFB]

- (a) MSISDN of MS(a1)
- (b) Time of activation of CFB hr/min/sec
- (c) DN of calling PSTN telephone(b2)
- (d) DN of forwarded - to - PSTN telephone(a1). Note 1
- (e) Party with which MS(a1) is in conversation
- (f) Time of start of call hr/min/sec
- (g) Delay between dialling last digit of MSISDN of MS(a1) at PSTN telephone(b2) and PSTN telephone(a1) ringing. Note 1 secs
- * (h) Time of perceived answer of call hr/min/sec
- * (i) Chargable Call Duration (i.e. perceived answer until end of call) secs
- (j) Was an announcement that call was - being - forwarded received by PSTN telephone(b2)? ▼
- (k) Language of announcement [If applicable]
- (l) Text of announcement [If applicable]

CF is not available for our customers in roaming.

- (m) Quality of call [Excellent, Good, Fair, Poor, Bad] ▼
- (n) Echo present? ▼
 If Yes, to which party? [caller/called] ▼
- (o) Time of deactivation of CFB hr/min/sec
- (p) Comments:

Note 1. If forwarding to PSTN telephone (b1) is restricted by HPLMN or VPLMN, then use MS(a2).
 If MS(a2) cannot be used then choose PSTN telephone (a)

- (q) Testcase Result ▼
- Signature of Tester Date

A 2.2.8. CALL FORWARD ON NO REPLY.[CFNRY]

- (a) MSISDN of MS(a1)
- (b) Time of activation of CFNRY hr/min/sec
- (c) Interrogate Supplementary Service at MS(a) by pressing ***#61#SEND**
- (d) Time of start of SS activity (i.e. SEND key operation) hr/min/sec
- (e) Delay between SEND key operation and receipt of Display information secs
- (f) Information displayed on MS(a)
- (g) Does MS(a) displays correct status of the call forwarding service? ▼
- (h) DN of calling PSTN telephone(b2)
- (i) DN of forwarded - to - PSTN telephone(a1). Note 1
- (j) Time of start of call hr/min/sec
- (k) Delay between dialling last digit of MSISDN of MS(a1) at PSTN telephone(b2) and PSTN telephone(a1) ringing. Note 1 secs
- (l) Length of time for which MS(a1) "rings" secs
- *(m) Time of perceived answer of call hr/min/sec
- *(n) Chargable Call Duration (i.e. perceived answer until end of call) secs
- (o) Was an announcement that call was - being - forwarded received by PSTN telephone(b2)? No ▼
- (p) Language of announcement [If applicable]
- (q) Text of announcement [If applicable]

CF is not available for our customers in roaming.

- (r) Quality of call [Excellent, Good, Fair, Poor, Bad] Good ▼
- (s) Echo present? No ▼
- If Yes, to which party? [caller/called] - ▼
- (t) Time of deactivation of CFNRY hr/min/sec

A 2.2.8

(u) Comments

Note 1. If forwarding to PSTN telephone (b1) is restricted by HPLMN or VPLMN, then use MS(a2).
If MS(a2) cannot be used then choose PSTN telephone(a).

(v) Testcase Result

Signature of Tester

Date

**APPENDIX B
Completion Certificate for MoU-IREG Stage 4 Testing for Inter-PLMN Roaming**

This certificate confirms the successful completion of MoU-IREG Stage 4 Tests for Mobile

Subscribers of
PLMN visiting PLMN.
This VLR SCCP address but not limited to.

The Services tested were:-

- Telephony Basic Service
- Call Barring Supplementary Services
- Call Forwarding Supplementary Services
- Short Message Services

Other comments

Toll Ticket file is being forwarded from PLMN to
 PLMN
via MOU TADIG procedures.

The tests were completed on (IREG)

The testing team in PLMN

were:

The testing team in PLMN

were:

Signed Date

of PLMN

Signed Date

of PLMN