



SMARTLINK "A division of NESS CORPORATION Pty Ltd"

Unit 4/56 Norcal Rd Nunawading 3131

Ph (03) 9875 6400 Fax (03) 9875 6422

www.smartlink.com.au



SMARTLINK MEDICAL ALARM TEST RESULTS ON VARIOUS RSP (Retail service provider) INSTALLATIONS

Location: Facility in the NBN fibre footprint, Brunswick VIC 3056.

Description/Prelude:

We tested three current Medical Alarm units which have been released since 1999 with various firmware upgrades over the years including the newer Medi-Link Alarms released in 2007. The testing was carried out with various results on several different RSP service providers that were connected to this facility. NB: Although tests were carried out successfully of the majority of the RSP providers we cannot guarantee that this will not change in the field with varying conditions and or environments.

There was one underlying abnormality with all the service providers which was that the various RSP networks all seemed to send a single tone down the line at the start of an open call which we assume was the RSP's way of instruction the system to start, enter and or engage the ATV area and or section of the call transmission. This had an adverse effect in that the 1st KISS on tone generated from any control room (The signal to the units to deliver their data) was corrupted to incorporate 3 tones send down the line (2 from the control room and one from the carrier). In each case the 1st KISS on tone was not recognised by all products and in all cases it was the 2nd KISS on tone that was recognised by all the units. **NB:** There are also two audio files that can be enclosed by email in conjunction with this test result documentation for verification if requested but will be at our sole discretion.

This adverse effect had little impact on the operation of the systems (The only exception would be if there are any receivers in the field that have only one KISS on tone in their format before hanging up when used on the NBN system). This would in effect cause any alarm units to be cut off before transmitting their data and would not work on the NBN network with the various RSP's under this condition.

This phenomenon also created a small delay in the transmission of data from all the units until the 2nd KISS on tone was correctly heard which did not seem to be a problem for any product that we tested but we cannot verify if it will create a future problem for other products that have critical time factors inbuilt as per the strict AMEMCO timing parameters.

NB: Medi -Link 2 was also enhanced to incorporate various programmable data timing adjustments for testing that can be altered in relation to data to be sent, listen, wait and or resend etc., outside the strict ADEMCO timing guide lines. These programmable features were incorporated to try and limit any present and or future adverse network latency effects with various RSP's on the NBN system to try to combat the unknown in relation to NBN and or various fibre to the node installations now and in the future.

Test # 1 SMARTLINK – NBN Voice Service Interoperability Testing Results

Device under Test:

Device Name	Smartlink Medi Call 1
Device Type/Category	Medical Alarm “Auto Voice”
Device Model	Medi Call 1
Hardware Revision	2
Firmware Revision	2.7
Serial Number	31191
Image of Product (<i>name.jpg</i>)	

Test Type: (*check one – add details if required*)

Outbound to Handset	Yes
Inbound to Device	Yes
Back to Base	Yes
Other (detail)	Yes – Up/Download inbound to device

Type of call: (*check one – add details if required*)

Voice	Yes
Data	Yes
DTMF	Yes
Other (detail)	Yes – Up/Download inbound to device

Number(s) dialled:

1800 905 069	1300720054	0398943068		


Test case detailed description (function of test)
<p>Medi-Call Alarm Panel dialled back to base reporting alarm events. Dialled to a back to base control room reporting on all numbers listed to ensure the alarms / events were received and the events were ‘kissed off correctly’ and the Medi-Call alarm panel received the acknowledge tones and hung up and did not try to redial. Multiple events were transmitted to ensure that all went through reliability.</p> <p>Dialled into the Medi Alarm Panel after an alarm was transmitted to open up the two way voice to confirm operation and to confirm DTMF commands accepted correctly. Dialled into Medi Call alarm to confirm Up/Download remote programming functioned correctly.</p>
Anticipated/Expected Outcomes
<p>Expected outcome was for the Medi-Call panel to dial the back to base control room on the listed phone numbers, receive the acknowledge tone and respond by transmitting the correct data with no transmission errors and once complete have the Medi-Call alarm panel hear and respond to the ‘kiss off’ tone and then hang up and not try to redial.</p> <p>Expected outcome when Dialled into the Medi Alarm Panel after an alarm was transmitted was to auto open up the two way voice and accept 2 way voice conversation hands free and utilise DTMF commands to control conversations etc. Expected outcome was to Dial into Medi Call alarm using the Up/Download program to remote control and or program the Medi unit remotely over the network.</p>

Test # 1 RESULTS TABLE:

RSP	Port	Pass	Fail	Partial	Qualification/Comments
Internode	UNI-V	Y			All Ok on 1 st attempts & Up/Download OK
iiNet	UNI-V	y		Y	We did notice that on some occasions it took two to 3 attempts for the reports to go through. E.G 90% 1 st time, 98% 2 nd time, 100% 3 rd or 4 th time - Up/Download OK
Telstra	UNI-V	Y			All Ok on 1 st attempts - Up/Download intermittent on occasion.
Primus	UNI-V	Y			All Ok on 1 st attempts - Up/Download intermittent on occasion.
NextGen	UNI-V	Y		Y	We did notice that on some occasions it took two to 3 attempts for the reports to go through. E.G 90% 1 st time, 98% 2 nd time, 100% 3 rd or 4 th time - Up/Download intermittent on occasion.
Skymesh	UNI-V		Y		Failed – All attempts to report to the control room failed. We noticed a very long delay time from the time the number was dialled to the time the ‘ring’ was detected at the control room end. Up/Download Failed.
Telstra	UNI-D	Y			All Ok on 1 st attempts – NB: Does not support DTMF commands for correct operation of unit for voice contact and as such cannot be utilised under AS4607 Personal response systems. Up/Download Failed
APN	UNI-V		Y		Failed – All attempts to report to the control room failed. Up/Download intermittent.
Commander	UNI-V	Y			All Ok on 1 st attempts - Up/Download OK

Test # 2 SMARTLINK – NBN Voice Service Interoperability Testing Results

Device under Test:

Device Name	Smartlink Medi-Link
Device Type/Category	Medial Alarm Panel “Auto Voice”
Device Model	Medi Link 1
Hardware Revision	V2
Firmware Revision	2.0
Serial Number	2803
Image of Product (<i>name.jpg</i>)	

Test Type: (*check one – add details if required*)

Outbound to Handset	Yes
Inbound to Device	Yes
Back to Base	Yes
Other (detail)	Yes – Up/Download inbound to device

Type of call: (*check one – add details if required*)

Voice	Yes
Data	Yes
DTMF	Yes
Other (detail)	Yes – Up/Download inbound to device

Number(s) dialled:

1800 905 069	1300720054	0398943068		

Test case detailed description (function of test)
Medi-Link 1 Alarm Panel dialled back to base reporting alarm events. Dialled to a back to base control room reporting on all numbers listed to ensure the alarms / events were received and the events were ‘kissed off correctly’ and the Medi-Link 1 alarm panel received the acknowledge tones and hung up and did not try to redial. Multiple events were transmitted to ensure that all went through reliability. Dialled into the Medi Alarm Panel after an alarm was transmitted to open up the two way voice to confirm operation and to confirm DTMF commands accepted correctly. Dialled into Medi Call alarm to confirm Up/Download remote programming functioned correctly.
Anticipated/Expected Outcomes
Expected outcome was for the Medi-Link 1 panel to dial the back to base control room on the listed phone numbers, receive the acknowledge tone and respond by transmitting the correct data with no transmission errors and once complete have the Medi-Link 1 alarm panel hear and respond to the ‘kiss off’ tone and then hang up and not try to redial. Expected outcome when Dialled into the Medi Alarm Panel after an alarm was transmitted was to auto open up the two way voice and accept 2 way voice conversation hands free and utilise DTMF commands to control conversations etc. Expected outcome was to Dial into Medi Call alarm using the Up/Download program to remote control and or program the Medi unit remotely over the network.

Test #2 RESULTS TABLE:

RSP	Port	Pass	Fail	Partial	Qualification/Comments
Internode	UNI-V	Y			All Ok on 1 st attempts & Up/Download OK
iiNet	UNI-V	Y		Y	We did notice that on one occasion it took two to 3 attempts for the reports to go through. E.G 95% 1 st time, 100% 2 nd time, Up/Download OK
Telstra	UNI-V	Y			All Ok on 1 st attempts - Up/Download OK
Primus	UNI-V	Y			All Ok on 1 st attempts - Up/Download OK
NextGen	UNI-V	Y		Y	We did notice that on some occasions it took two to 3 attempts for the reports to go through. E.G 90% 1 st time, 98% 2 nd time, 100% 3 rd or 4 th time - Up/Download OK.
Skymesh	UNI-V		Y		Failed – All attempts to report to the control room failed. We noticed a very long delay time from the time the number was dialled to the time the ‘ring’ was detected at the control room end.
Telstra	UNI-D	Y			All Ok on 1 st attempts – NB: Does not support DTMF commands for correct operation of unit for voice contact and as such cannot be utilised under AS4607. Up/Download OK
APN	UNI-V		Y		Failed – All attempts to report to the control room failed. Up/Download intermittent.
Commander	UNI-V	Y			All Ok on 1 st attempts - Up/Download OK

Test # 3 SMARTLINK – NBN Voice Service Interoperability Testing Results

Device Under Test:

Device Name	Smartlink Medi Link 2
Device Type/Category	Medial Alarm Panel “Auto Voice”
Device Model	Medi Link 2
Hardware Revision	V2
Firmware Revision	2.1
Serial Number	02434
Image of Product (<i>name.jpg</i>)	

Test Type: (*check one – add details if required*)

Outbound to Handset	Yes
Inbound to Device	Yes
Back to Base	Yes
Other (detail)	Yes – Up/Download inbound to device

Type of call: (*check one – add details if required*)

Voice	Yes
Data	Yes
DTMF	Yes
Other (detail)	Yes – Up/Download inbound to device

Number(s) dialled:

1800 905 069	1300720054	0398943068		

Test case detailed description (function of test)
Medi-Link 2 Alarm Panel dialled back to base reporting alarm events. Dialled to a back to base control room reporting on all numbers listed to ensure the alarms / events were received and the events were ‘kissed off correctly’ and the Medi-Link 2 alarm panel received the acknowledge tones and hung up and did not try to redial. Multiple events were transmitted to ensure that all went through reliability. Dialled into the Medi Alarm Panel after an alarm was transmitted to open up the two way voice to confirm operation and to confirm DTMF commands accepted correctly. Dialled into Medi Call alarm to confirm Up/Download remote programming functioned correctly.
Anticipated/Expected Outcomes
Expected outcome was for the Medi-Link 1 panel to dial the back to base control room on the listed phone numbers, receive the acknowledge tone and respond by transmitting the correct data with no transmission errors and once complete have the Medi-Link 1 alarm panel hear and respond to the ‘kiss off’ tone and then hang up and not try to redial. Expected outcome when Dialled into the Medi Alarm Panel after an alarm was transmitted was to auto open up the two way voice and accept 2 way voice conversation hands free and utilise DTMF commands to control conversations etc. Expected outcome was to Dial into Medi Call alarm using the Up/Download program to remote control and or program the Medi unit over the network.

Test # 3 RESULTS TABLE:

	RSP	Port	Pass	Fail	Partial	Qualification/Comments
	Internode	UNI-V	Y			All Ok on 1 st attempts - Up/Download OK
	iiNet	UNI-V	Y			All Ok on 1 st attempts - Up/Download OK
	Telstra	UNI-V	Y			All Ok on 1 st attempts - Up/Download OK
	Primus	UNI-V	Y			All Ok on 1 st attempts - Up/Download OK
	NextGen	UNI-V	Y			All Ok on 1 st attempts - Up/Download OK
	Skymesh	UNI-V	Y			All Ok on 1 st attempts NB: Only after major timing changes on DTMF pauses “Unacceptable” Up/Download OK
	Telstra	UNI-D	Y	Y	Y	All Ok on 1 st attempts – NB: Does not support DTMF commands for correct operation of unit for voice contact and as such cannot be utilised under AS4607. Up/Download OK
	APN	UNI-V		Y		Failed – All attempts to report to the control room failed. Up/Download intermittent.
	Commander	UNI-V	Y			All Ok on 1 st attempts - Up/Download OK

Appendix – NBN/RSP Service and Equipment Details

	RSP	NBN NTD Port	RSP CPE Brand/Model
	Internode	UNI-V	N/A
	iiNet	UNI-V	N/A
	Telstra	UNI-V	N/A
	Primus	UNI-V	N/A
	NextGen	UNI-V	N/A
	Skymesh	UNI-V	N/A
	Telstra	UNI-D	N/A
	APN	UNI-V	N/A
	Commander	UNI-V	N/A