

City of Philadelphia
Comments on Non-Service Initialized Devices
FCC 15-43
PS Docket No. 08-51

The Commission requires providers to transmit both 911 calls originating from customers that have contracts and calls originating from non-service initialized (NSI) devices to PSAPs. The Commission is seeking comment on whether the obligation to transmit 911 calls from NSI devices continues to serve an important public safety objective.

The City of Philadelphia continues to receive fraudulent 9-1-1 calls from NSI devices. These calls reduce the City’s ability to respond to legitimate 9-1-1 calls and can impair the City’s wireless network. Emergency services may be dispatched if the 9-1-1 Center cannot with absolute certainty identify the caller as fraudulent.

The following data provides the degree to which fraudulent and repetitive calls from NSI devices has continued since the 2013 PN comments were filed.

The Philadelphia 9-1-1 Center received 2,808,031 9-1-1 calls in 2014. Of those calls 2,180,548 or 77.65% were from wireless devices; an average of 5,974 wireless calls per day. Calls originating from NSI devices accounted for 18.69% of the wireless calls.

CARRIER	Call Count	Non-Initialized Count	Percentage
ATTMO	644574	171330	26.6 %
LEAP	112416	31748	28.2 %
MPCSI	58867	17273	29.3 %
SPPCS	341306	36683	10.7 %
TMOB	775459	126407	16.3 %
VZW	247926	24141	9.7 %
		407582	

In the first quarter of 2015 476,580 wireless 9-1-1 calls were received by the Philadelphia 9-1-1 Center accounting for 77% of the total 681,262 calls received. Calls originating from NSC devices accounted for 16.90% of the wireless calls.

CARRIER	Call Count	Non-Initialized Count	Percentage
ATTMO	163447	37528	23.0 %
LEAP	5243	3363	64.1 %
SPPCS	88034	10147	11.5 %
TMOB	168152	23346	13.9 %
VZW	51704	6165	11.9 %
		80549	

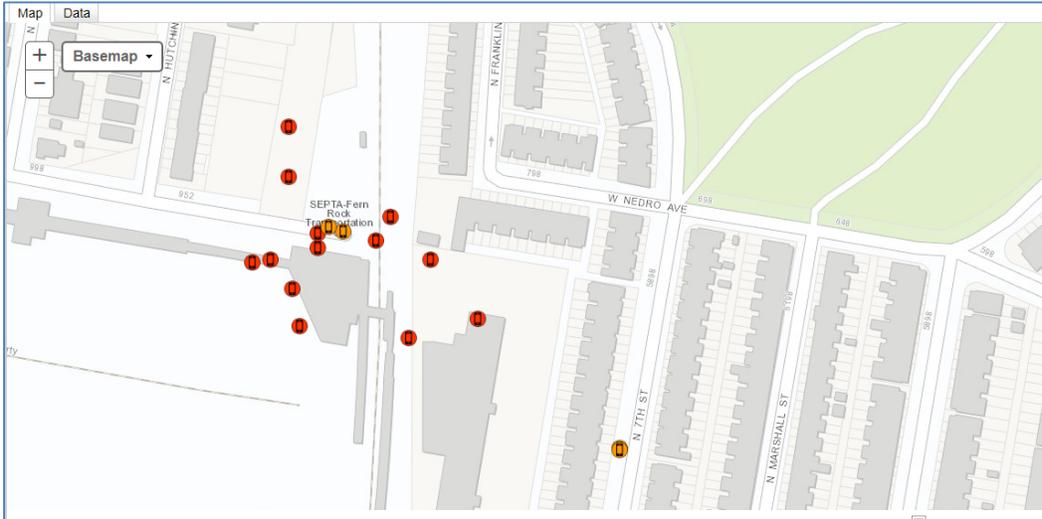
Listed below is the call count for non-initialized devices that generated 200 or more calls in the first quarter of 2015. These devices were responsible for 10.04% of non-initialized calls.

Phone Number	Non-Initialized Count	Carrier
911-433-4957	2709	ATTMO
911-974-9030	915	ATTMO
911-567-9166	804	ATTMO
911-224-7486	658	VZW
911-913-4214	460	SPPCS
911-178-2960	385	TMOB
911-497-4350	342	ATTMO
911-093-4064	317	ATTMO
911-614-2640	280	VZW
911-277-3105	258	SPPCS
911-517-8296	249	ATTMO
911-913-1906	242	SPPCS
911-603-6070	235	TMOB
911-600-4660	232	SPPCS
	8086	

Between January 1, 2015 and March 14, 2015, the City had one repetitive caller that placed 2709 calls. The call times for 74 calls placed on January 1, 2015 is provided below. Calls received just minutes apart can inundate the 9-1-1 Center and overload the wireless network.

Call Date	Time	Time	Time	Time	Time	Time
01/01/2015	0:05:19	0:40:28	3:05:29	5:30:44	16:29:56	21:11:25
01/01/2015	0:06:30	0:48:07	3:08:23	5:33:39	16:54:06	21:11:55
01/01/2015	0:07:35	0:56:32	3:09:08	15:13:49	16:54:41	21:31:05
01/01/2015	0:09:19	0:57:44	3:10:21	15:14:24	16:55:37	21:31:59
01/01/2015	0:13:29	1:00:32	3:11:11	15:15:01	16:57:42	23:27:02
01/01/2015	0:14:13	1:01:38	3:12:46	15:15:37	16:58:22	23:30:56
01/01/2015	0:17:05	1:38:50	3:13:30	15:16:11	17:16:13	23:31:47
01/01/2015	0:20:01	1:39:43	3:15:28	15:16:46	18:33:35	23:49:54
01/01/2015	0:23:06	1:40:17	3:16:54	15:19:24	18:34:08	23:51:17
01/01/2015	0:25:23	1:41:28	5:15:16	15:22:15	18:34:40	
01/01/2015	0:26:05	3:01:33	5:15:54	15:22:51	19:42:45	
01/01/2015	0:34:37	3:02:33	5:16:40	16:27:41	19:43:27	
01/01/2015	0:37:50	3:03:53	5:29:38	16:28:19	20:36:12	

All calls from this device were routed to the 9-1-1 Center by only 2 towers. The calls on January 1, 2015 were received as Phase I with 17 calls rebid to provide Phase II data as mapped below.



105,515 NSI devices were used to place calls to Philadelphia’s 9-1-1 Center in 2014. The number of calls that originated from these devices is listed below.

Calls per NSI Device	Non-Initialized Count	Percent
1 – 9	192941	47.34%
10 – 49	93867	23.03%
50 – 99	25764	6.32%
100 – 199	15438	3.79%
200 +	79573	19.53%

An analysis was done on all repeat calls in excess of 500 per month. Twenty one separate phones were responsible for 67,222 of them. Of that one phone in particular was responsible for 23,047 of those calls. That equates to 34.28% of the calls coming from one phone.

The chart below shows the aforementioned phones and the associated numbers. Each of these phones are NSI devices that provided no caller information or call back capability.

The majority of the calls from the top two numbers in the chart came over two towers. That tied up those towers from processing real 9-1-1 calls.

Because of the extremely large number of calls generated by 911-111-3600 an investigation was initiated. The results showed that this phone was a Safelink phone provided by Tracfone. The original owner was identified but the phone was no longer active. The information was turned over to the Police Department for further investigation.

Phone Number	Non-Initialized Count	Carrier
911-111-3600	23047	ATTMO
911-406-2156	10838	LEAP
911-411-1360	9093	TMOB
911-433-4957	5259	ATTMO
911-604-9171	1783	ATTMO
911-913-4214	1752	SPPCS
911-049-1710	1720	ATTMO
911-708-7799	1405	SPPCS
911-457-7313	1340	LEAP
911-492-0429	1306	ATTMO
911-594-7415	1249	ATTMO
911-497-4350	1054	ATTMO
911-501-5702	1053	LEAP
911-049-1710	1042	TMOB
911-076-3392	1019	MPCSI
911-277-3105	933	SPPCS
911-406-2156	710	MPCSI
911-096-3894	677	ATTMO
911-330-4294	655	VZW
911-674-0130	650	TMOB
911-947-4150	637	ATTMO
	67222	

The public has come to rely on the fact that NSI devices are capable of calling 9-1-1 and the City does received legitimate 9-1-1 calls from NSI devices; however, the City does support the Commission’s proposal to eliminate the NSI call-forwarding requirement.

The City feels the decreasing cost of service-initialized devices eliminates the need for the NSI rule. The NSI component of the rule provides a six-month transition period allowing for public outreach and education. The City feels it is better to have a uniform deadline rather than a phase out approach. If the call-forwarding requirement is eliminated, the City also feels providers must ensure a service-initialized phone can still call 9-1-1 if it appears to be an NSI device (e.g., when calls are placed from areas of weak or no signal for one carrier that receive a signal from another carrier).

If the NSI call-forwarding requirement is not adopted, the City of Philadelphia is in support of the option to allow providers to block harassing 9-1-1 calls from NSI devices as well as identifying further call-back capabilities for NSI devices.

Submitted by the City of Philadelphia on June 4, 2015