



Internet.bs

A Safe Haven for Drug-Related Cybercrime?

March 2012

Report Preview

- Internet.bs, one of about 450 ICANN-accredited Registrars, has only 0.2% global domain name market share, but about 33% of the world's rogue Internet pharmacy domains are registered with the company.
- Half of all rogue online pharmacies are registered with just two Domain Name Registrars.
- We told Internet.bs that we wanted to register thousands of domains to sell unapproved drugs and addictive medications without a prescription and without a valid pharmacy license.
- The company agreed to serve as our Registrar, saying it is one of the "safest Registrars" for "pharma domains," and would help protect our websites against international law enforcement initiatives aimed at stopping counterfeit drugs.

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“We are the Registrar of many thousand [sic] of pharmacy domains and we fight for you all to protect your interest as if you are happy, we are happy! [sic]” –Internet.bs customer support, Nov. 17, 2011, after being notified that the customer planned to sell OxyContin and Xanax without requiring a prescription.

Overview: Internet.bs, a PharmaCrime Safe Haven

This report¹ focuses on **Internet.bs**, one of about 450 distinct Domain Name Registrars accredited by the Internet Corporation for Assigned Names and Numbers (ICANN).² Despite only having less than 0.2% of the global domain name market (about 400,000 domain names out of 220 million³), LegitScript’s online pharmacy database indicates that Internet.bs is the Domain Name Registrar for about 33% of the world’s non-spam “rogue” Internet pharmacy domain names: websites such as buyfemaleviagracheap.net, noprescription-pharmacy.com and sibutraminewithoutprescription.com⁴ that are engaged in the illicit and dangerous sale of drugs unapproved for sale and/or drugs without a prescription.⁵ Our analysis of a separate list of over 9,000 “not recommended” online pharmacies compiled by the National Association of Boards of Pharmacy (NABP) yields an even higher figure, with Internet.bs sponsoring 43.9% of currently active “not recommended” online pharmacies identified by the NABP.

The disparity in market share alone should give one pause. If Internet.bs, a small Domain Name Registrar, has only succeeded in capturing 1 out of every 500 domain names on the Internet generally, how and why has it come to serve as the Registrar for between 33% and 44% of all websites engaged in illicit drug sales?

To find out, LegitScript went undercover.

In this report, we share specific examples of how LegitScript posed as an organized cybercrime network preparing to create thousands of websites selling counterfeit drugs and controlled substances

¹ This report was conceived, prepared and completed solely by LegitScript. It was not requested, funded, suggested, or in any way supported (financially or otherwise) by any third party whatsoever, including any domain name registrar, pharmacy, registry, ISP, government agency, pharmaceutical company or any other entity or individual.

² The number of ICANN-accredited Domain Name Registrars depends on how you count it. By one measure, there are about 1,000 — but many of these are subsidiaries of the same company. In total, there are closer to approximately 450.

³ See <http://www.webhosting.info/registrars/search/Country/BS>, which as of February 2012 actually indicated a much lower figure: 137,951, which would be less than 0.1%. We give Internet.bs the benefit of the doubt as much as possible, and look to its recent claim at <http://twitter.com/internetbs> on January 10, 2012 that it had registered 400,000 domain names. In any case, we estimate that Internet.bs has between less than 0.1% and 0.2% of the global domain name market.

⁴ With respect to these specific domain names, which market what they imply, note that there is no such thing as “female Viagra”; the sale of prescription drugs without a prescription is unlawful and dangerous in virtually all jurisdictions; and sibutramine, a controlled substance, has been linked to heart failure and is banned in many jurisdictions.

⁵ Please refer to Appendix A for a full explanation of our methodology and our definition of “rogue” Internet pharmacies.

(addictive drugs, like Vicodin) without a prescription. As we demonstrate below, in an undercover capacity, we explained to Internet.bs that we required an “offshore” solution that would allow us to register thousands of domain names to sell addictive drugs without a prescription. These included drugs marketed as genuine, branded cancer medications, but which were our “own formulation.” Over the course of several undercover email communications, we explained that global regulatory authorities, including the US Food and Drug Administration and its EU regulatory counterparts, had previously shut down our Internet pharmacies for safety reasons, costing us thousands of domain names and millions of dollars, and asked for the company’s help in re-registering the same Internet pharmacy domain names that had previously been shut down by global law enforcement, as well as several thousand other domain names.

Fig 1: Internet.bs actively markets itself as an “offshore” Registrar, which is often a “dog whistle” to website operators who want to conduct illegal activity and evade law enforcement or regulatory scrutiny.



Internet.bs agreed to help, and even pointed to other rogue Internet pharmacies using its registration services such as pharm4all.com (which sells prescription drugs, including unapproved versions, without a valid prescription or required pharmacy licenses) as proof that our Internet pharmacies would be safe. The company emphasized that it would ignore any safety notifications from the FDA or other drug safety authorities. (Amusingly, it also mentioned it would ignore any alerts from LegitScript, the author of this report.) In short, we couldn’t have been more explicit that our Internet pharmacies operated illegally and unsafely. Internet.bs couldn’t have been more explicit about being willing to serve as a safe haven for our rogue websites.

We went on to register with Internet.bs over one hundred seventy-five domain names such as controlled-drugs.net and oxycodonenoprescription.com that appeared to be selling products like Vicodin and Xanax without a prescription, and explained that we would be registering thousands more. Given every possible opportunity to balk at its platform being used to facilitate drug-related cybercrime, Internet.bs instead chose to welcome the business, even suggesting additional ways for us to evade scrutiny and “protect” our illicit online pharmacies. Specific examples are provided later in this report.

* * * * *

Online pharmacrime is a particularly odious type of cybercrime. It doesn’t merely offer fake goods that violate trademark or patent rights. It offers vulnerable customers fraudulent medicines that sometimes

result in overdose and death, and gives seriously ill patients false hope via the online sale of untested or even counterfeit cancer treatments and other cures. Rogue pharmacy websites are contemptible in and of themselves, but to stay online, these websites need a cooperative Registrar.

The purpose of this report is to shed light on the clustering of pharmacrime websites at a handful of Registrars who welcome and knowingly profit from this criminal activity, by highlighting the most egregious of the bunch. Safe haven Registrars like Internet.bs base part or all of their business strategy on exploiting the seemingly jurisdictionless nature of the Internet in order to profit from activity that is surely criminal, but is made harder to prosecute when the criminal actors attempt to evade law enforcement by hiding outside of their target countries' borders. Some Registrars, including Internet.bs, cater to the cybercrime community by boasting that they are "offshore" or otherwise outside of the jurisdiction of the country whose drug safety laws website operators using their services seek to violate.

But this does not mean nothing can be done to curtail rogue Registrars' knowing furtherance of illegal activity. Indeed, the original structure of the Internet intended for Domain Name Registrars and the Internet community to voluntarily regulate themselves – as a preferred alternative to expanded government authority and oversight – in the hope of maintaining an autonomous but safe online community.

This report provides a supported argument for interested and relevant parties — such as ICANN, the registries that administer top-level domain names (such as Nominet, which administers .UK), and others — that Internet.bs knowingly operates as a safe haven for illicit online drug sales and fails to bear out the good faith self-regulation that is paramount to keeping Internet compliance in the hands of Internet companies, not the government. While we do believe that law enforcement agencies worldwide can and should take action against Internet.bs, and also believe that government agencies have an important voice in the future of the Internet, we see the more pressing call to action as urging Internet companies to stay true to the original intent of Internet self-regulation and oust companies like Internet.bs from their midst.

To that end, this report presents two types of proof of Internet.bs' role as a pharmacrime safe haven. The first is market data showing that roughly 33% of the world's non-spam rogue Internet pharmacies rely on Internet.bs for domain name registrations. The second type of proof is the communication trail between Internet.bs and LegitScript (undercover), exposing the company's willingness to serve as a safe haven for criminal drug-related activity.

I. Overview: The Internet Pharmacy Market

There are several types of cybercrime — phishing, spam, botnets and others — but only a few types of cybercrime result in physical harm and death. Pharmacrime, or the illicit online sale of pharmaceuticals, is among the most egregious. Consider three examples:

- In July 2011, it was reported that a Japanese female died who had purchased a prescription diet drug over the Internet. The drug arrived from Thailand and contained undisclosed sibutramine, a controlled substance prescription drug linked to heart failure.⁶
- In June 2011, the Irish Examiner reported that Irish authorities determined that two men had died in unrelated incidents after taking tranquilizers purchased over the Internet. In addition to being purchased without a valid prescription, the drugs were counterfeit.⁷
- In May 2011, UK authorities reported that Lorna Lambden, a London paramedic, died after taking sleeping pills she had bought over the Internet without a prescription from a foreign website.⁸

These are not isolated cases: there are multiple examples in the US and elsewhere over the last decade, including Ryan Haight's death in 2001 (US),⁹ Marcia Bergeron's death in late 2006 (Canada),¹⁰ and the death of an unidentified Kansan man in 2008 (US),¹¹ all linked to rogue online pharmacies.

How big is the problem? Available data suggests that it is prevalent:

- LegitScript has, over the last four years, identified over 200,000 online pharmacies. Of these, 93% - 97% are engaged in intentional and knowing violation of drug safety laws, selling prescription drugs without a prescription and/or selling unregulated drugs. All falsely market themselves to customers as legitimate (e.g., selling "FDA-approved" drugs).
- We estimate that at any one time there are 35,000 - 45,000 non-spam online pharmacies in operation, of which 93% - 97% are "rogue."¹²

⁶ <http://sankei.jp.msn.com/life/news/110707/bdy11070720570002-n1.htm>

⁷ <http://www.examiner.ie/ireland/internet-drugs-linked-to-deaths-158146.html>

⁸ <http://www.dailymail.co.uk/news/article-1388795/Paramedic-Lorna-Lambden-died-overdosing-sleeping-tablets.html>

⁹ http://www.getsmartaboutdrugs.com/stories/ryan_haight_story.html

¹⁰ <http://www.canada.com/vancouver/news/story.html?id=ddadbf8a-bdac-45c4-a566-36acd8fd72b>

¹¹ <http://www.narconon-news.org/blog/2011/04/internet-pharmacy-caused-death/>

¹² Please see Appendix A for a note about methodology and how spam Internet pharmacies enter into the equation.



- In a recent analysis of 8,445 online pharmacies, the National Association of Boards of Pharmacy (NABP) found that 96% of online pharmacies were operating out of compliance with legal and drug safety requirements.¹³ The vast majority of these did not require a valid prescription for prescription drugs.

In short, a pervasive characteristic of the Internet pharmacy market is its lack of compliance with healthcare laws designed to protect patient safety, with about 19 out of 20 websites operating in overt violation of drug and patient safety standards.

¹³ NABP Internet Drug Outlet Identification Program, Progress Report for Federal and State Regulators (October 2011).

II. Domain Name Registrars (and Why They Matter)

Why do Domain Name Registrars like Internet.bs matter in the context of cybercrime? As a practical matter, websites do not exist without a domain name, and a domain name cannot exist without a Domain Name Registrar — companies like Internet.bs.¹⁴

Domain names are what is typed into a browser bar: whitehouse.gov for The White House, or bbc.co.uk for BBC News, for example. Registrars are companies like GoDaddy, Network Solutions or eNom that facilitate the registration of domain names. In everyday language, if you want to set up your own website, one of the first steps is to find a Registrar and “register” a domain name.

But companies can’t automatically grant themselves the right to sell domain names out of thin air. For most types of domain names (e.g., those ending in .com or .net), Registrars must remain accredited by an organization called the Internet Corporation for Assigned Names and Numbers (ICANN).¹⁵ As part of that accreditation, the Registrar has to abide by certain rules.

The Rules: How Internet Governance Works

ICANN requires that Registrars adhere to contractual requirements spelled out in a Registrar Accreditation Agreement (RAA) as well as the Uniform Dispute Resolution Policy (UDRP). The RAA requires that Registrars abide by applicable laws and regulations, and the UDRP (which is incorporated, by referenced, into registration agreements) establishes a policy requiring Registrars to prohibit registrants from using domain names for unlawful purposes.¹⁶

This is central to understanding how Internet governance is supposed to work. Rather than being under the control of governments, court orders and law enforcement, the rules that are supposed to prevent the Internet from devolving into anarchy are based on two sets of voluntary contracts:

- 1) The contract between the Registrar and the customer, in which the Registrar must prohibit the registrant from using the domain name in violation of applicable laws, and
- 2) The contract between ICANN (and/or the appropriate Registry) and the Registrar, requiring the Registrar to implement and enforce those contracts.

¹⁴ Seasoned Internet-types will note that this is technically not accurate: you can have a website solely with an IP address (e.g., 67.132.256.23), but virtually nobody uses the Internet by typing in IP addresses.

¹⁵ There are exceptions: .UK Registrars are accredited by Nominet (not ICANN), for example, but ICANN’s role holds true for most types of domain names.

¹⁶ See [2009 ICANN Registrar Accreditation Agreement 3.7.2](#), and [Uniform Dispute Resolution Policy](#), Paragraph 2.

It is perhaps important to clarify the limits of these obligations. The RAA and UDRP do not require Registrars to monitor every domain name registered with their company for potentially unlawful activity; nor do they make the Registrar liable for a Registrant's illicit activities. But implicit in the requirements of the RAA and UDRP is the notion that Registrars, because they must contractually prohibit their customers' use of domain names for unlawful purposes and must also themselves adhere to applicable laws and regulations, cannot turn a blind eye to or knowingly facilitate the unlawful use of those domain names. Put another way, a Registrar cannot knowingly help its customers violate the very contractual provisions that the Registrar is supposed to require them to adhere to.

It is also important to clarify that although the UDRP deals primarily with trademarks and a process for resolving trademark disputes (the dispute resolution process, occasionally confusingly, is also referred to as the "UDRP"), the UDRP's prohibition against using domain names for unlawful purposes is not dependent upon a formal dispute resolution process. (Indeed, there is no such process for filing a UDRP complaint and seeking dispute resolution based on unlawful activity.) The language of the UDRP is clear: the UDRP provisions, including the prohibition against using domain names for unlawful purposes, are specifically incorporated by reference into the contract between the Registrar and the Registrant.

That's why Registrars matter: Internet governance wasn't developed on a model based on court orders.¹⁷ After all, what about a Registrar (like Internet.bs) that operates in Country "A" in order to help its customers violate the law in Countries "B" through "Z" and argues that it is out of reach of those countries' courts? Rather, it is based on a set of voluntary contracts intended not only to minimize any single government's influence over the Internet, but also to ensure that problems like "offshore" Registrars do not go unaddressed. And that's a good thing: it promotes autonomy and freedom on the Internet, but allows for a mechanism of control to ensure a safe online community. Unfortunately, Registrars like Internet.bs represent a breakdown of this mechanism – which governments around the world have started to notice – and a focus on profits instead of safety.

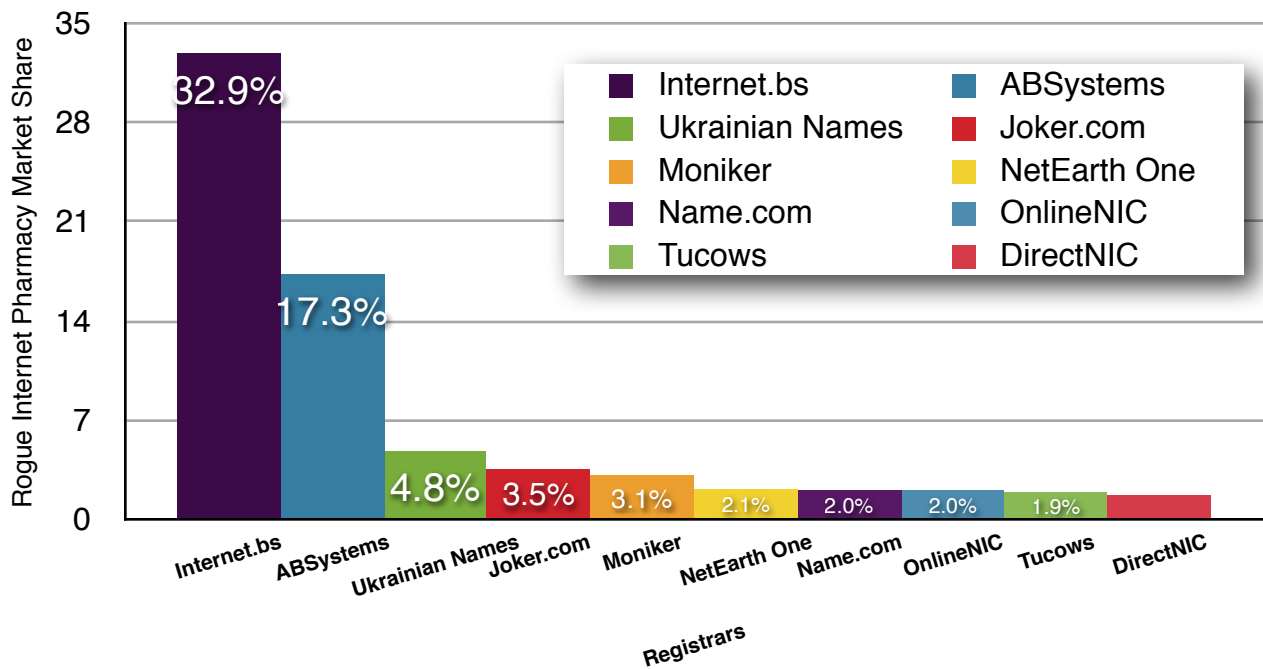
¹⁷ If your initial reaction is that Internet governance should be based on court orders alone, be patient -- or jump ahead to the conclusion, where this issue is addressed.

III. Safe Haven Registrars: Rogue Internet Pharmacy Market Share

LegitScript's data show that despite the existence of roughly 450 distinct Domain Name Registrars,¹⁸ there is an undeniable clustering of rogue Internet pharmacies at just a few Registrars, with Internet.bs leading the pack. According to our database:

- Roughly 33% of all rogue Internet pharmacies are sponsored by just one Registrar, Internet.bs.
- Over 50% of all rogue Internet pharmacies are sponsored by just two Registrars, Internet.bs and ABSystems. Both market themselves as “bulletproof”¹⁹ or “offshore.”²⁰
- Nearly 55% of all rogue Internet pharmacies are sponsored by three (3) registrars (the two above plus the Center for Ukrainian Internet Names).
- Over 71% of all rogue Internet pharmacies are registered by 10 Registrars (see below).
- Over 81% of all rogue Internet pharmacies are registered with 20 Registrars, out of approximately 450.
- Just 10% of the 450 Domain Name Registrars (45 companies) have 91% of the rogue online pharmacy market.

Registrars' % of the rogue Internet pharmacy market: the Top Ten



¹⁸ According to ICANN's [list](#) as of January 29, 2012, there were precisely 1,000 accredited Domain Name Registrars. However, many of these are actually the same company — for example, eNom, eNom1008 and eNom1033 all have separate accreditations but are actually the same company. Our review indicates that there are actually about 440 to 460 unique companies.

¹⁹ See, e.g., bulletproofmeds.com/faq.php

²⁰ See Internet.bs' twitter account at twitter.com/internetbs which announces, “We are OFFSHORE!” (capitalization in the original).

The statistics above should be startling: just two domain name Registrars (out of about 450) — Internet.bs and ABSystems — serve as the Registrar for half of the world’s rogue Internet pharmacy domain names. Nearly one in three of these domains, or 33%, is with Internet.bs.

As noted in the introduction, we also looked to a list of “not recommended” online pharmacies separately developed by the National Association of Boards of Pharmacy (NABP), the non-profit organization that represents the various government agencies in the US, Canada and some other jurisdictions that license and regulate pharmacies and pharmacists. In February 2012, there were 9,032 online pharmacies on this list. LegitScript’s review indicated that of these, 4,150 were still online. Internet.bs is the Registrar for 1,820 of those 4,150, or 43.9%.

Stop and put this in context for a moment. One might reasonably expect that rogue Internet pharmacy market share would be spread out among Registrars in a way that reflects their overall domain name market share. That is, the top two Registrars, GoDaddy and eNom, have about 35% and 8.5% of the world’s domain names, respectively, so one might initially suppose that each would also have about 35% and 8.5% of all rogue Internet pharmacies. But they don’t: both of these companies suspend domain names engaged in cybercrime, including rogue online pharmacies, and on average, have less than 1% of the rogue Internet pharmacy market at any one time, which is nothing more than an inevitable function of their global domain name market share; these illegal websites are usually quickly identified and disabled. Cybercriminals are rational economic actors and will naturally seek a Domain Name Registrar who will turn a blind eye toward their criminal activity.

Explained another way, we could determine if a Registrar or ISP is a “safe haven” for a particular type of criminal activity by looking at the ratio of their share of a particular illicit market to their overall domain name market share. The higher the ratio, the bigger the indication of a problem; the lower the ratio, the more the company disallows the use of its platform in furtherance of criminal activity. Using this method, a ratio of 1:1 is exactly what one would expect of a company that is neither a safe haven nor does much to monitor its platform.

With that in mind, consider the following table that includes not only the top ten Registrars by rogue Internet pharmacy market share (in red), but also eight²¹ (in green) that actively prohibit the use of their platforms by rogue Internet pharmacies but have large market shares generally.

²¹ GoDaddy and Wild West Domains are technically separately accredited Registrars but are the same corporate entity, so their market shares are collapsed into one. Only one top-ten Registrar globally, Moniker, is also a top-ten sponsoring Registrar of rogue online pharmacies, and is the leading sponsoring Registrar of rogue online pharmacies in the US.

Table 1: Registrar Global Domain Name Market Share vs. Rogue Internet Pharmacy Market Share²²

Registrar	Rogue Rx market share	Global domain name market share	Disparity
Internet.bs	32.9%	0.12%	274 : 1
ABSystems*	17.3%	0.001%	17,300 : 1*
Ukrainian Names	4.8%	0.017%	282 : 1
Joker.com	3.6%	0.397%	9 : 1
Moniker	3.1%	1.75%	1.8 : 1
NetEarth One	2.1%	0.056%	37.5 : 1
Name.com	2.0%	0.647%	3 : 1
OnlineNIC	2.0%	0.667%	3 : 1
Tucows	1.9%	6.739%	1 : 3.5
DirectNic	1.7%	0.649%	2.6 : 1
GoDaddy/WildWest	<0.1%	35.3%	1 : 353+
eNom	<0.1%	8.7%	1 : 87+
Network Solutions	0.4%	5.316%	1 : 12.5
Schlund & Partner	0.8%	4.483%	1 : 6
Melbourne IT	0.4%	3.235%	1 : 8
ResellerClub	<0.1%	2.1%	1 : 21
Register.com	0.2%	1.922%	1 : 10

The higher the ratio, the greater the extent to which the Registrar serves as a safe haven for pharmacrime. In other words, both Internet.bs and the Center for Ukrainian Names have a disparity in their rogue Internet pharmacy market share to total domain name market share of about 275-to-1. ABSystems is a somewhat different case, and although the table above lists a 17,300-to-1 ratio, the company appears to be exclusively affiliated with, and probably co-controlled or co-owned by, a rogue Internet pharmacy network: accordingly, its ratio is actually closer to infinity-to-zero.²³ NetEarth has a problem, as does DirectNIC. By contrast, rigorous and consistent enforcement by GoDaddy, eNom, Network Solutions and Directi are reflected as extremely low ratios of 1 to a much higher number. This is the case with the majority of Registrars (who, for space reasons, are not included above). Although Tucows has a low ratio, it does not warrant a “green” rating due to its consistent refusal to meaningfully address drug cybercriminals using its platform.

Obviously, there are some daily fluctuations here — a particular Registrar can certainly shift a few percentage points depending on the day — but the top three “safe havens” for rogue Internet pharmacies, with Internet.bs in the leading position, consistently have a ratio of rogue Internet pharmacy market share to global domain name market share that is too high to be seen as a fluke. Indeed, solely for the sake of argument, even if one were to agree that these numbers fluctuate on a daily basis; that

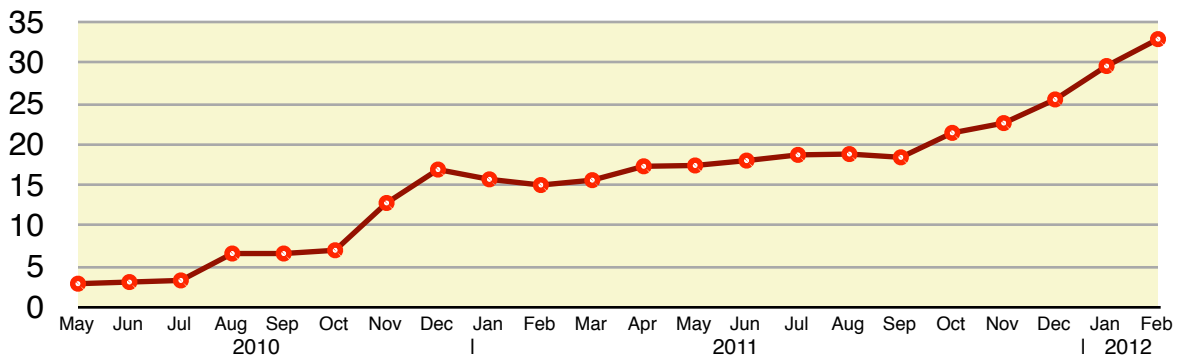
²² Global domain name market share estimates were provided by webhosting.info, a free service provided by Directi, an India-based reseller.

²³ ABSystems ratio is probably closer to ∞ -to-1. (Yes, that’s an infinity symbol.) That’s because ABSystems appears to exist for the sole purpose of providing domain name registrations for a rogue Internet pharmacy network. However, the Registrar appears to block services that estimate total domain name registrations: one source, webhosting.info, estimates that the company only has about 1,428 domain names, but we have several thousand more in our database.

there is presumably some margin of error; that there must be some rogue Internet pharmacies not yet in LegitScript’s database with *other* Registrars (thus driving Internet.bs’ rogue online pharmacy market share down); and that those Registrars actually have greater overall market share than what is cited above, there is still no way to give Internet.bs, ABSystems and the Center for Ukrainian Names the benefit of the doubt to an extent that permits them to plausibly claim that their rogue Internet pharmacy domain name market share is simply a natural function of their overall market domain name share.

Moreover, this has been a consistent trend for months. Consider Internet.bs’ rogue Internet pharmacy market share from mid-2010 until early January: our data indicated that it steadily increased from only about 2.0% in mid-2010 to 33% today. Based on monthly rogue Internet pharmacy market share data, the graph below illustrates Internet.bs’ steady-but-sure trend toward dominance of the market for pharmacrime domain name registrations as measured by LegitScript’s database. And, LegitScript’s and the NABP’s lists are prepared independently, not in coordination. The fact that the NABP’s list has an even higher proportion of “not recommended” online pharmacies registered with Internet.bs supports the conclusion that the data are largely accurate.

○ Chart 1: Internet.bs rogue Internet pharmacy domain name market share



The data in this section lead to some inescapable conclusions. First, just two or three Registrars out of hundreds account for over half of all rogue Internet pharmacies, and Internet.bs accounts for roughly a third of all rogue Internet pharmacies. Second, from a statistical perspective, this is not — and cannot be — a natural, accidental result of those Registrars’ overall domain name market share. Third, the overall trajectory over 18 months illustrates that Internet.bs’ market share is not an aberration resulting from, for example, a one-time bulk domain name registration of thousands of websites by a single illicit pharmaceutical drug seller. Rather, it is a continuing, steady upward trend.

This leads to the question of why. To find out, LegitScript went undercover as a criminal organization called “Pay-Rx.biz.”

IV. Internet.bs: The Undercover Investigation

As background to this section, it's important to first emphasize that LegitScript had previously reached out to Internet.bs on no less than ten (10) separate occasions over two years, notifying the company about rogue Internet pharmacies on its platform, explaining the dangerous nature of each website, and offering to provide any additional information Internet.bs might request at no cost. We also provided copies of a [letter](#) from the National Association of Boards of Pharmacy (NABP) on behalf of US and Canadian pharmacy regulators to Registrars asking them to work with LegitScript (again at no cost) to help identify rogue Internet pharmacies. We even “tweeted” about our notifications — and Internet.bs follows LegitScript on [twitter.com](#). The NABP had also written Internet.bs a [separate letter](#) to request that the company do more about rogue Internet pharmacies on its platform.

Internet.bs did not respond to any of these communications, sent over nearly two years.

Undercover Investigation: The First Steps

To set the stage, LegitScript registered a fictitious Internet pharmacy “affiliate network” called [pay-rx.biz](#). (We did not register this with Internet.bs, but rather with another Registrar.) Our website invited

Fig 2: Pay-Rx.biz, a fake Internet pharmacy marketing network set up for undercover research

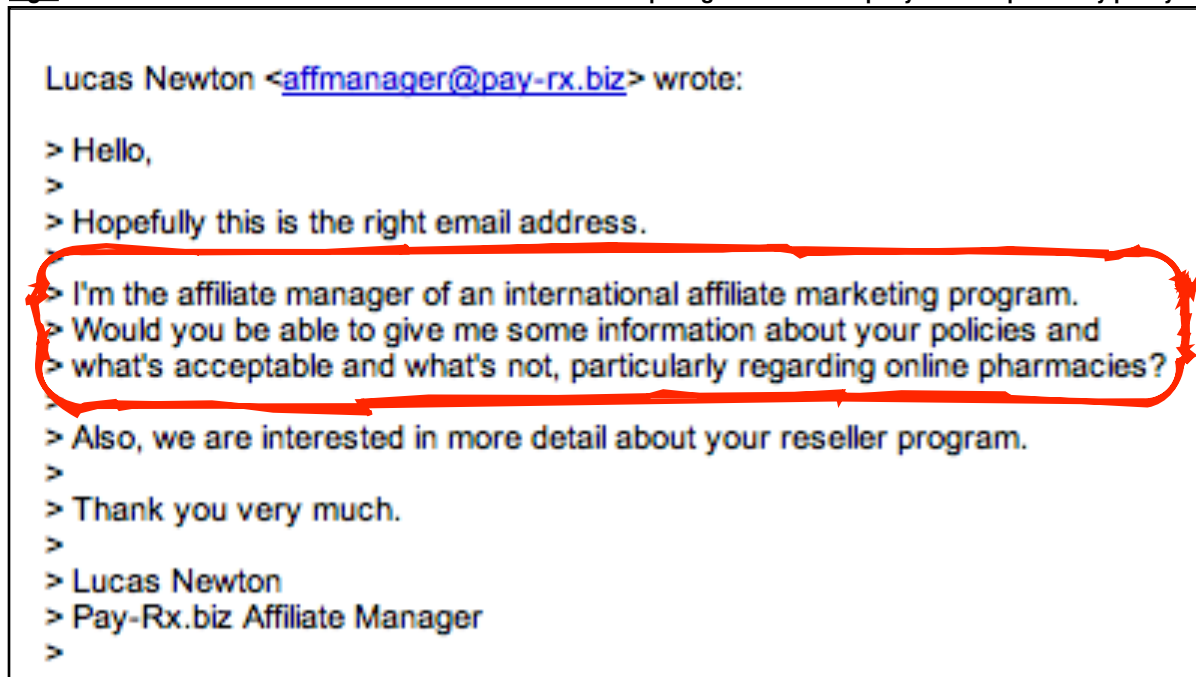


individuals to “open (their) own online pharmacy...no prescription or license required!” As shown above, our website was quite blatant, posting products like Alprazolam and Phentermine, both of which are controlled substances internationally,²⁴ subject to addiction and overdose, and announcing that the products did not require a prescription or pharmacy license.²⁵

After we deployed pay-rx.biz, we created several email addresses using pay-rx.biz email accounts. Fictitious email addresses included “affmanager@pay-rx.biz” (used by the fictitious “Lucas Newton”) and others that we used to contact Internet.bs.

We first contacted Internet.bs using the undercover identity Lucas Newton, asking for clarification about their online pharmacy policies, explaining that we operate an “international affiliate marketing program” and requesting information about what’s acceptable and what’s not as to online pharmacies.

Fig 3: Undercover email from “Lucas Newton” to Internet.bs inquiring about the company’s online pharmacy policy



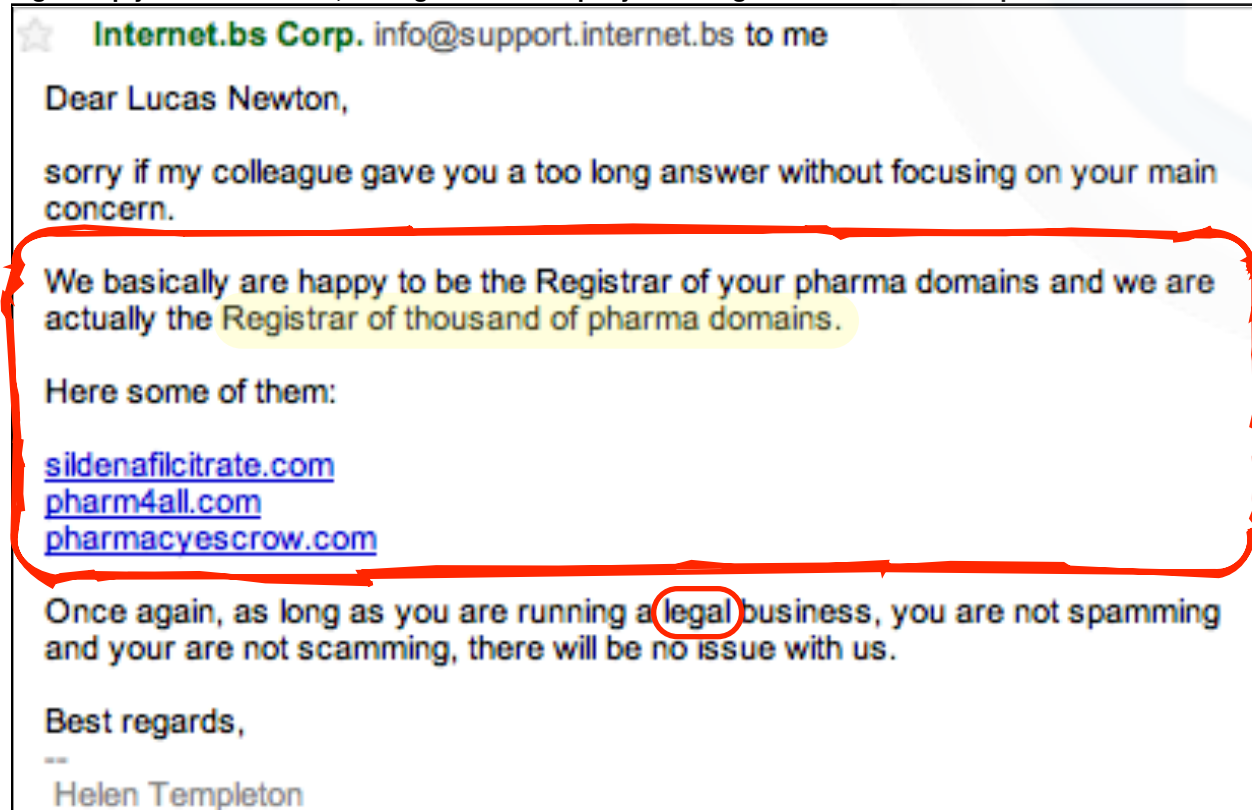
```
Lucas Newton <affmanager@pay-rx.biz> wrote:  
> Hello,  
>  
> Hopefully this is the right email address.  
>  
> I'm the affiliate manager of an international affiliate marketing program.  
> Would you be able to give me some information about your policies and  
> what's acceptable and what's not, particularly regarding online pharmacies?  
>  
> Also, we are interested in more detail about your reseller program.  
>  
> Thank you very much.  
>  
> Lucas Newton  
> Pay-Rx.biz Affiliate Manager  
>
```

Initially, we received a reply that was fairly general in nature. Within a few minutes, without prompting, it was followed by a second non-automated email from Internet.bs, stating that the company is “happy to be the Registrar of (our) pharma domains” and acknowledging that they are “actually the Registrar of thousand (sic) of pharma domains,” thereafter listing examples of three Internet pharmacies registered with Internet.bs. The email then stated that as “long as (we) are running a legal business” and “not spamming (or) scamming” there would “be no issue.”

²⁴ See http://www.incb.org/incb/yellow_list.html

²⁵ Of course, our website did not actually sell or facilitate the sale of any products.

Fig 4: Reply from Internet.bs, stating that the company is the registrar of thousands of pharma domains.



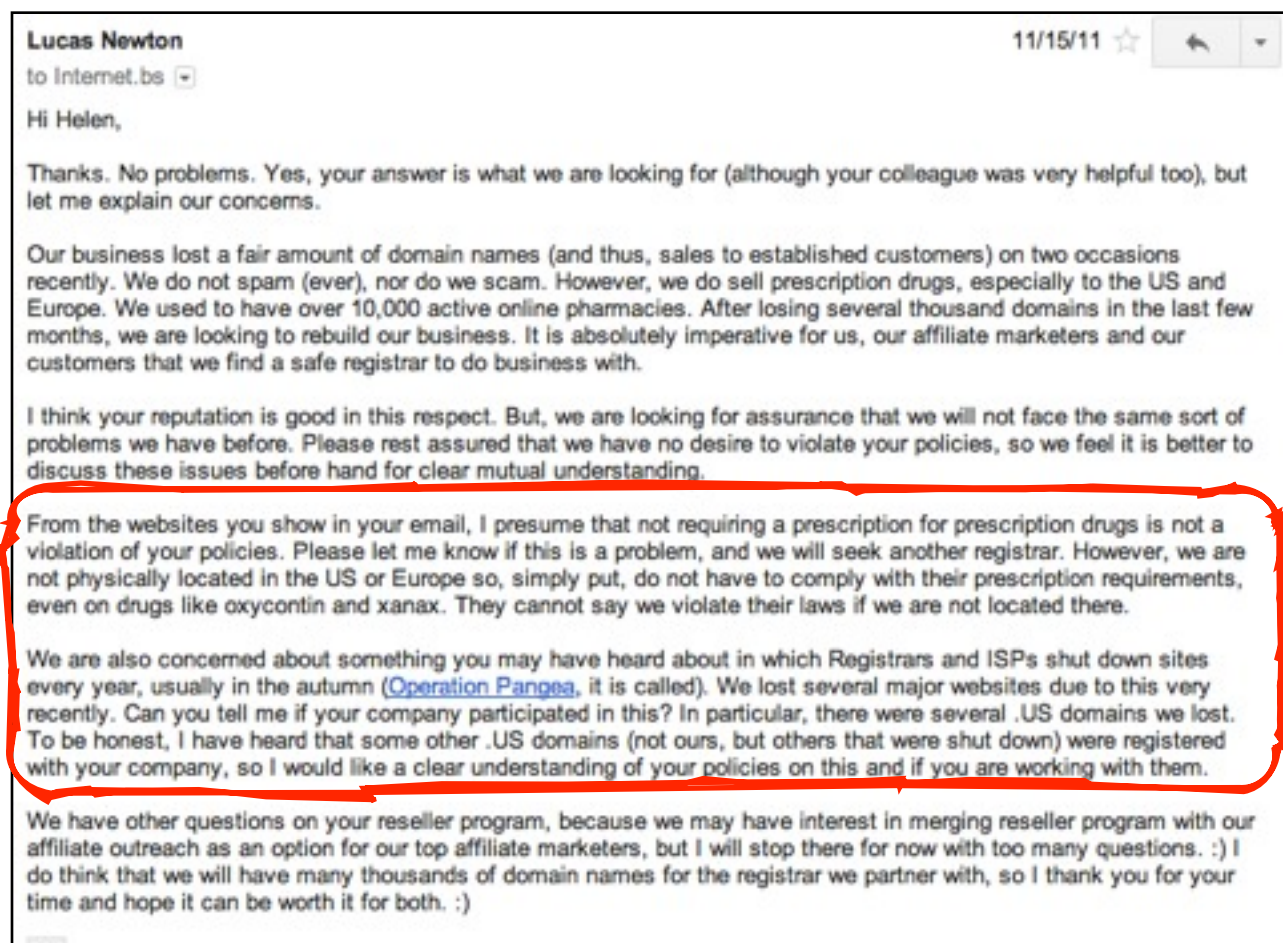
Let's stop for a moment and focus on the term "legal" in the email above. What makes an online business "legal"? An online business, just like an offline business, must operate in accordance with the laws both where it is located, and where it does business (in this case, geographic markets it sells prescription drugs to). As we will see, it ultimately made no difference to Internet.bs whether we were operating legally or not — in fact, we ran out of ways to signal to Internet.bs that our online pharmacies were not legal.

Before continuing with a summary of the email traffic, it is important to note a couple of initial red flags with the email above. First, of course, is the company's apparent knowledge that it is a major sponsor of "pharma domains." Second are the examples it listed: although sildenafilcitrate.com has since changed content, it was previously part of a criminal network called "MedsPartners" selling unregulated drugs without a prescription; pharm4all.com remains a major rogue online pharmacy selling unregulated drugs, including unapproved cancer treatments without a prescription; and pharmacyescrow.com has since partly gone out of business, but at the time was also a major rogue online pharmacy falsely posing as "Canadian" while sending unregulated drugs without a prescription from locations other than Canada. So, the pharma domains that Internet.bs pointed us to are and were certainly not operating legally. To

those who might react “But how is Internet.bs, who is just the Registrar, supposed to know that?” we address, hopefully satisfactorily, that question later on in this report.

It was troubling that the company pointed us to these illegal websites, but we wanted to give Internet.bs every opportunity to deny us the possibility to use their platform in furtherance of criminal activity. So the next day, we wrote Internet.bs back. We explained that we were selling prescription drugs without a valid prescription, including Oxycontin and Xanax — drugs that are controlled substances not just in a few countries like the US, but by virtue of international treaties. Selling prescription drugs without a valid prescription is nearly universally illegal and is highly dangerous, particularly so for addictive drugs like Oxycontin and Xanax. We also explained that we were concerned about an international law enforcement operation called “Operation Pangea.” This is a real annual cooperative effort involving over 80 global law enforcement agencies, including the DEA and FDA and their international counterparts, that targets Internet-based sales of counterfeit drugs by notifying Registrars and ISPs, who subsequently disable the websites.

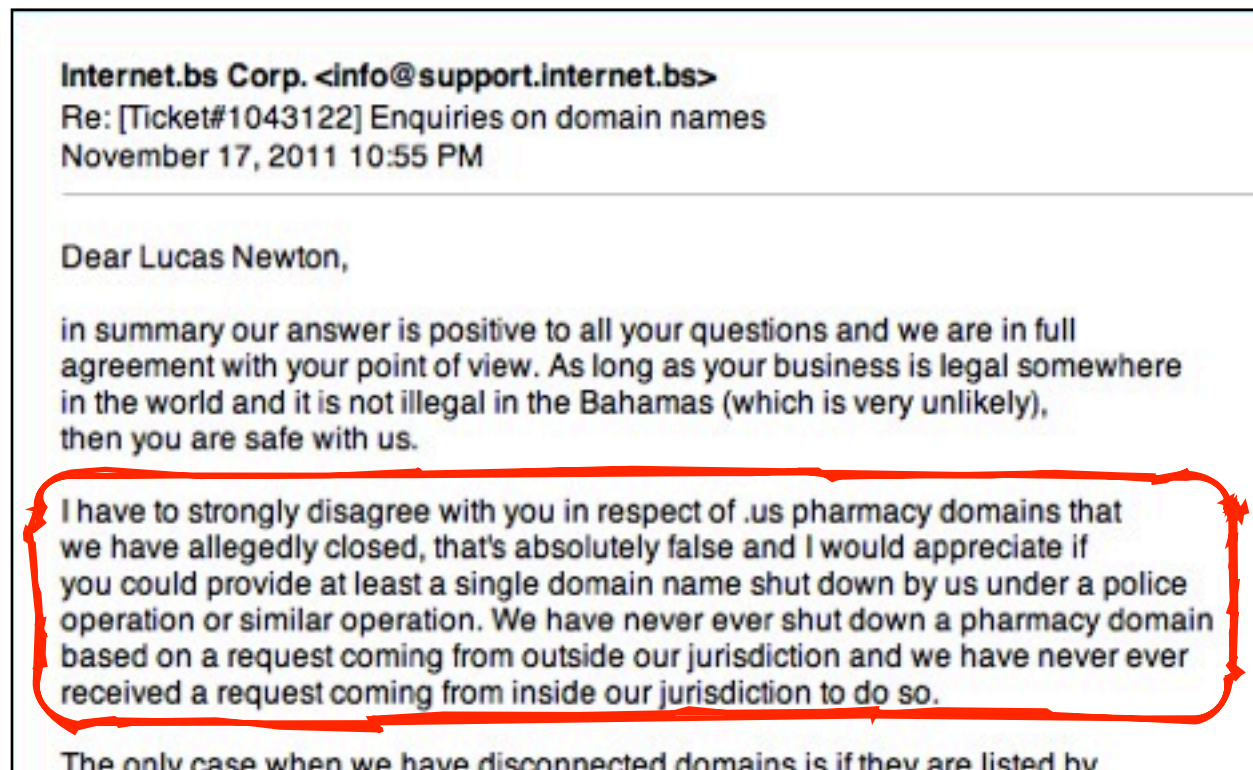
Fig 4: Undercover email to Internet.bs stating that our websites sell prescription drugs without a prescription, including OxyContin and Xanax



As shown above, we pointed the company to an informational page about [Operation Pangea](#) within a government website ([interpol.int](#)), specifically inquiring as to whether Internet.bs was one of the Registrars who cooperated with such operations. (Throughout the world, the vast majority of Registrars and ISPs discontinued providing services to websites selling counterfeit drugs based on notifications from Operation Pangea.) We explained that several of our Internet pharmacies had been shut down, so we wanted to have a clear understanding of how Internet.bs would respond if notified by drug safety regulators that our websites were engaged in counterfeit drug sales.

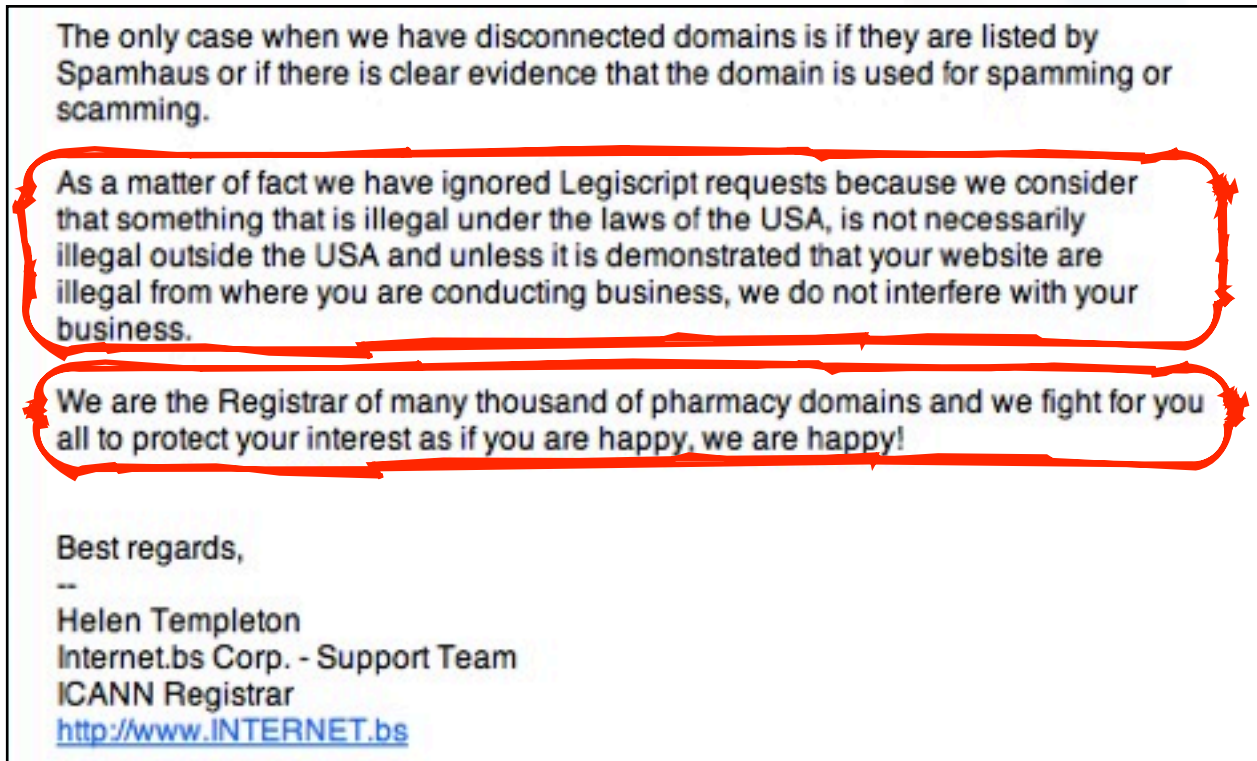
As can be seen below, the company vehemently denied that it had (or would) cooperate with drug safety regulators in disabling counterfeit drug websites, even seeming offended and asking for an example. It indicated that “as long as (our) business is legal somewhere in the world” and “not illegal in the Bahamas” we would be safe with Internet.bs. (Yet Internet.bs never even asked for so much as a pharmacy license as proof of legality.)

Fig 5a: Reply from Internet.bs, indicating that our online pharmacies selling drugs without a prescription would be safe (truncated for length)



Quite amusingly, the company also indicated that it ignored LegitScript notifications about rogue online pharmacies — an undeniably true statement. But the company’s reply, shown below, is telling for an important reason: they appear to admit that they know that the websites we notify them about are, in fact, operating illegally at least in the US.

Fig 5b: Reply from Internet.bs, indicating that our online pharmacies selling drugs without a prescription would be safe (truncated for length)



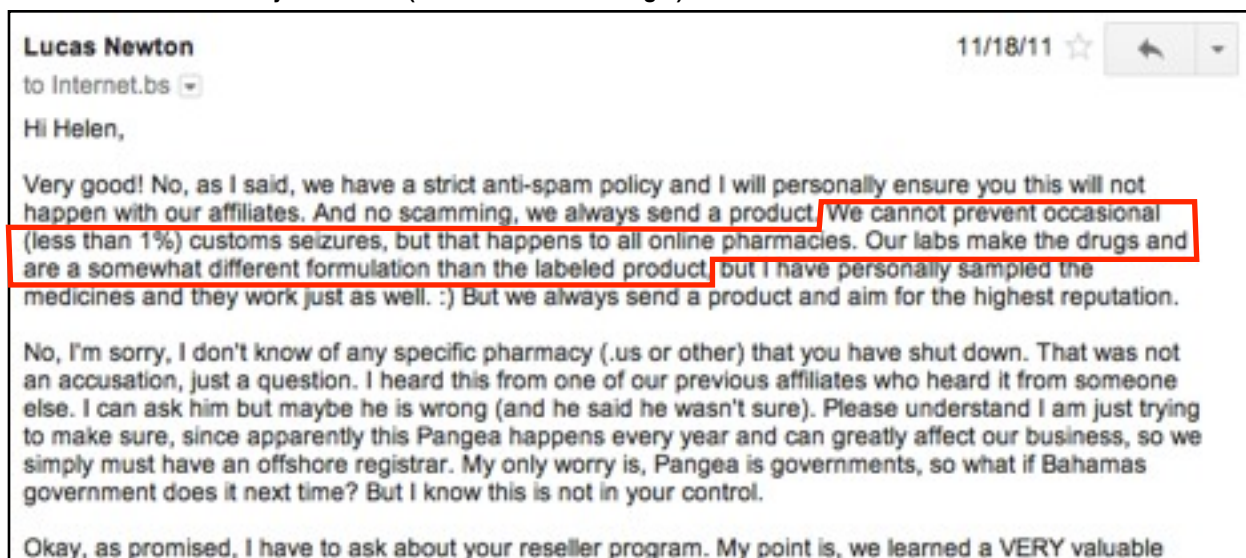
Let's stop again for a moment to think about what the problem is with the response above. First, any rogue Internet pharmacy can technically claim to be "legal" or at least "not illegal" somewhere in the world in a way that is misleading. After all, if a website doesn't ship counterfeit drugs to a particular jurisdiction — pick one, say, Albania — it can accurately say it isn't violating that jurisdiction's laws. (It's a little like saying that if you commit theft in France, you haven't committed a crime in Argentina and are thus operating legally there. Possibly true, but beside the point nonetheless: you're still a thief.) As we stated before, an online business, just like an offline business, must operate legally in the jurisdiction where it is located as well as any jurisdiction in which it does business, in order to be legal. Put in blunt terms, an online pharmacy isn't legal just because it moves offshore in order to ship drugs into the jurisdiction where, if it were physically located there, it would be quickly shut down and the operators arrested.

Second, Internet.bs stated that it was "in full agreement with [our] point of view." This "point of view," among other things, presumed that Internet.bs would allow pharma domains that openly sold controlled substances such as Oxycontin and Xanax without a prescription, and would ignore law enforcement and drug safety regulator notifications that our pharma domains were, in fact, illegal. Indeed, Internet.bs confirmed that they would not respond to notifications or police operations from outside "their"

jurisdiction. Yet the Registrar Accreditation Agreement (RAA) specifically states that the Registrar must abide by applicable laws and governmental regulations; moreover, Registrars must require Registrants to not use domain names in furtherance of unlawful activity. Operating as a safe haven for Registrants that wish to violate the law in other countries — and even ignore notifications of illegality on their platform from law enforcement agencies in multiple countries — is contrary to the spirit of the RAA (if not in outright violation of it) and invites government scrutiny.

In our undercover response to Internet.bs, we again signaled to the company that our websites operated unlawfully, noting that sometimes our drugs are seized by Customs officials — yet another clear indication that our operations were not legal. Even more troubling, we also indicated that “our labs make the drugs” and are a “different formulation than the labeled product” — that is to say, counterfeit — but that they “work just as well.” Internet.bs’ response to both of these red flags was simply to assure us that our websites would be safe with them.

Fig 6a: Undercover email to Internet.bs, conceding our drugs were sometimes seized by Customs and are a “different formulation” than what they are sold as (email truncated for length).



In the same email, we also inquired about Internet.bs’ reseller program. Resellers are third parties who are not accredited Registrars, but set up websites and sell domain names on behalf of the Registrar and then take a share of the profits. We dangled a proposition before Internet.bs: since we recruit affiliate marketers to set up online pharmacies for us, could we sign up as a reseller and make sure that all of our rogue Internet pharmacy operators used Internet.bs exclusively? This would, we explained, be a “win-win” since Internet.bs would then provide protection for our rogue Internet pharmacies.

Fig 6b: Undercover email to Internet.bs, asking about a registrar-reseller partnership in order to better protect our affiliate marketers

Okay, as promised, I have to ask about your reseller program. My point is, we learned a VERY valuable lesson: we should not let our affiliates choose the Registrar, what if they don't know and choose GoDaddy? Or eNom? Or another who doesn't ignore LegitScript? We spend time helping on SEO and then the site gets shut down -- a total waste of our time! So, we had the idea to merge our affiliate program and become a reseller with a trusted registrar. Does this make sense? It would go like this -- which I think is to your benefit and ours:

1. Existing affiliate marketers has domain with other registrar, OR wants a new domain
2. In first case, we tell them to transfer to safe registrar (you) if they want to be our affiliate. In second case (new domains), we are reseller and give them "good deal" on domains, including bulk -- so it helps us market our affiliate program too
3. Or, we pre-register valuable pharmacy domain names and provide to our affiliates.

So, I need to know -- two questions: 1) what commission could we get as reseller, and 2) can we get bulk rate? (Our goal is 1,000 new domains by Feb 1, although we of course may do in stages, like just 100-250 at first, and we got to above 10,000 domains in previous years!) From the business perspective, this is good for everyone: you get thousands of new domains; we are both reseller and affiliate manager and can make sure our affiliates do not to go anti-pharmacy registrar and so we do not lose profits. But is this acceptable arrangement to InternetBS? (If necessary, we can only provide back-end reseller services so it is not public -- we only care about protecting our affiliates, not focusing on domain name business.)

As shown below, the company agreed, again emphasizing that it is "one of the safest Registrars for pharma domains," and suggesting we charge a premium in light of our ability to "further protect the (illegal) domain."

Fig 7: Reply from Internet.bs, regarding our rogue online pharmacy network becoming a reseller to help protect rogue online pharmacy domains

☆ **Internet.bs Corp.** info@support.internet.bs to me

Dear Lucas Newton,

I think the reseller option would be the best, as we will only deal with a single customer, i.e. you and you will address the matters individually with your affiliates. We can offer you a discounted price if you buy by Paypal Mass Payment or by Wire transfer and you can resell the domain to your customers at the price that you prefer. You can charge a premium stating that you have direct relation and a large portfolio with us and that it is allowing you to further protect the domain.

in order to qualify for the discounted price, you have to keep a balance of USD500.00 and pay by Wire Transfer or Paypal Mass Payment:

<https://internetbs.net/en/domain-name-registrations/price.html>

check the column (Wire Only I).

Once again, we know that we are one of the safest Registrars for pharma domains and following our guidelines we are sure there will be no problem at all with your affiliates.

Best regards,
--
Helen Templeton
Internet.bs Corp. - Support Team
ICANN Registrar
<http://www.INTERNET.bs>
--

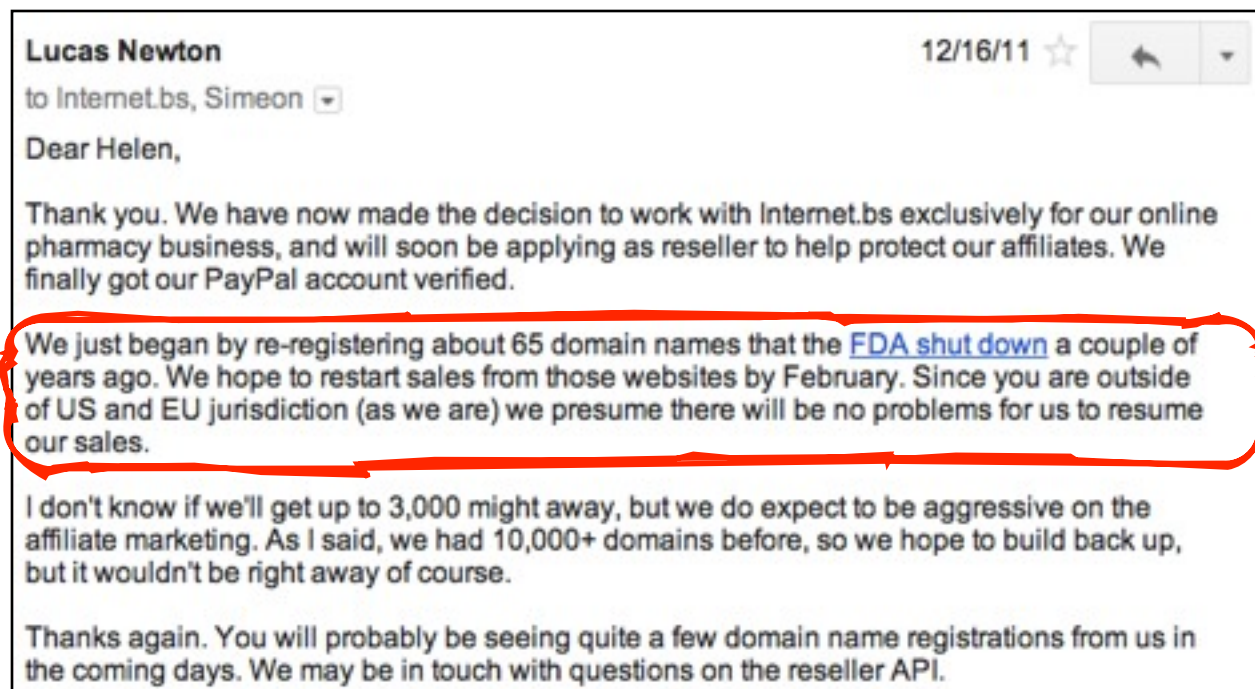
V. Internet.bs and Operation Pangea

Before we go on to describe the rest of our undercover fake pharma operation, it's important to take a minute and set the stage to refute any potential response that Internet.bs sponsors only lawful domains.

In October 2010, 44 countries participated in an “international week of action” to combat counterfeit and illicit medicines sold online. Referred to as “[Operation Pangea](#),” the Interpol-led initiative resulted in 87 arrests or investigations, 102 search warrants, 2 million pills seized, and — most relevant to this report — 297 rogue Internet pharmacies shuttered by Registrars.²⁶

In our communications with Internet.bs, we told the company that our organization had been the one whose websites were the subject of Operation Pangea in 2010 and had been shut down by the FDA and other global law enforcement agencies for public health reasons.²⁷ However, we explained, we wanted to resume our business, this time with an offshore Registrar we could trust who would help us keep our websites to stay online despite their illicit nature. In an earlier email, we had already explained that our websites had been shut down by Operation Pangea, and linked to Interpol's webpage about the

Fig 8: Undercover email to Internet.bs, telling them that the FDA had shut down our rogue Internet pharmacies for selling unapproved drugs, and we would like to re-register them with Internet.bs to resume our business



²⁶ <http://www.interpol.int/Crime-areas/Pharmaceutical-crime/Operations/Operation-Pangea>

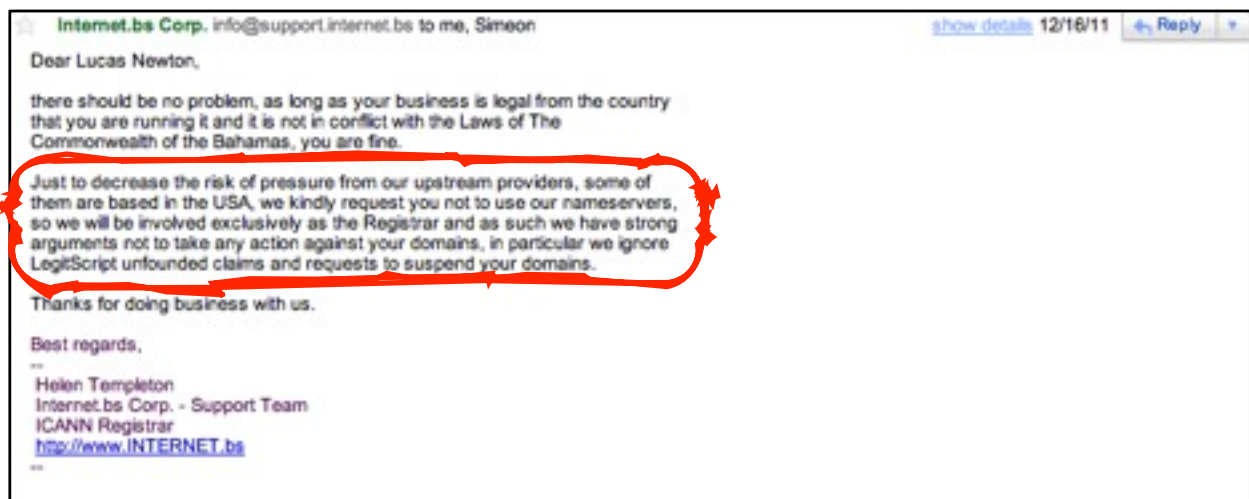
²⁷ Of course, these were not really ours. These were affiliated with a Russian criminal network called Rx-Promotion discussed in detail on cybercrime reporter Brian Krebs' [blog](#). But the registration for about 58 of the websites that had been shut down had expired, making the website available for re-registration.

operation. In the email below, we provided a link to the [FDA's warning letter](#) that explicitly listed the domain names we sought to re-register, indicating the domains were in fact operating illegally. We had also openly stated that our drugs were marketed as genuine branded drugs but were actually our own formulation (meaning, counterfeit).

As shown in the email above, we noted that we had already re-registered several of the previously-shut-down websites²⁸ with Internet.bs and “hope to restart sales from those websites by February...since (Internet.bs is) outside of US and EU jurisdiction (as we are) we presume there will be no problems for us to resume our sales.”

In reply, Internet.bs confirmed that there should be “no problem” and allowed us to register those domains that had been previously shut down by drug safety regulators, even suggesting that we use other nameservers (not Internet.bs) to further protect our websites. (Note: nameservers are what “point” a domain name to the actual content that resides on a server.)

Fig 9: Reply from Internet.bs, indicating that there would be no problem re-registering the rogue Internet pharmacies that had previously been disabled by other Registrars, and suggesting that we use other name servers.



Again, Internet.bs asserted the argument that as long as our business was legal where we were located²⁹ and in the Bahamas, we were safe with them. Conveniently, Internet.bs’ legal argument ignored, once again, the fact that our websites would be operating illegally in the jurisdictions with which we were doing business. In fact, Internet.bs specifically helped steer us away from US-based providers to “decrease the risk of pressure” and ensure the safety of our domains with them. This action implies their knowledge of illegal activity on our part, and exposes their willingness to facilitate illegal activity.

²⁸ The remainder were suspended but technically still registered to the original registrant, meaning that they were offline but not available for us to re-register.

²⁹ It is also worth remembering, as noted on page 18, that Internet.bs never asked us for a pharmacy license of any sort.

The 58 websites that had previously been shut down by the FDA and Interpol that we re-registered were clearly listed on the FDA's website as operating illegally, for which we provided the link to the FDA warning letter as noted earlier in this report. What's more, they contained domain names that should have been red flags, like noprescriptionphentermine.us and oxycodonenoprescription.com. (More on that in the next section.) The full list of domains we re-registered that had previously been disabled in Operation Pangea but that Internet.bs permitted us to re-register, knowing of their prior criminal involvement, were:

Internet pharmacy	Shut down by FDA/Interpol	Re-registered with Internet.bs under name...	Internet pharmacy	Shut down by FDA/Interpol	Re-registered with Internet.bs under name...
alldrugspectia.org	10/2010	Sherlock Holmes	hot-meds.org	10/2010	Napoleon Bonaparte
bigsexpill.com	10/2010	Sherlock Holmes	hydrocodoneonline.biz	10/2010	Napoleon Bonaparte
buy-levitra-australia.info	10/2010	Sherlock Holmes	mypillsales.com	10/2010	Napoleon Bonaparte
buy-tramadol-australia.info	10/2010	Sherlock Holmes	nonprescriptionphentermine.us	10/2010	Napoleon Bonaparte
buy-valium-online.net	10/2010	Sherlock Holmes	nonprescriptionxanax.us	10/2010	Napoleon Bonaparte
buycodine.us	10/2010	Private Whols Private Whols	online-cheap-generic.com	10/2010	Napoleon Bonaparte
buyhealthshop.com	10/2010	Sherlock Holmes	online-pharmastore.com	10/2010	Napoleon Bonaparte
buying-hydrocodone.us	10/2010	Private Whols Private Whols	online-ultram.us	10/2010	Dr. Timothy Stevens
buying-phentermine.biz	10/2010	Sherlock Holmes	onlinecheapgeneric.com	10/2010	Napoleon Bonaparte
buying-vicodin.com	10/2010	Sherlock Holmes	onlinepharmacypill.com	10/2010	Napoleon Bonaparte
buyinghydrocodone.org	10/2010	Sherlock Holmes	onlinexworld.com	10/2010	Napoleon Bonaparte
buyingphentermine.biz	10/2010	Sherlock Holmes	onlinevalium.us	10/2010	Dr. Timothy Stevens
buyingvicodin.biz	10/2010	Sherlock Holmes	oxycodonenoprescription.com	10/2010	Napoleon Bonaparte
buyingvicodin.org	10/2010	Sherlock Holmes	pharma-fairy.com	10/2010	Harry S Truman
bypillsonline.com	10/2010	Sherlock Holmes	pill-s.com	10/2010	Harry S Truman
canadian-drugs-rx.com	10/2010	Sherlock Holmes	rxdoctor-health.com	10/2010	Harry S Truman
canadianrx-meds.com	10/2010	Napoleon Bonaparte	rxonlinecheap.com	10/2010	Harry S Truman
cheap-generic-online.com	10/2010	Napoleon Bonaparte	selectedcialis.com	10/2010	Harry S Truman
cheap-us-drugs.com	10/2010	Napoleon Bonaparte	tab-health.com	10/2010	Harry S Truman
cialis-australia.info	10/2010	Napoleon Bonaparte	tramadol-buy.us	10/2010	Dr. Timothy Stevens
controlled-drugs.net	10/2010	Napoleon Bonaparte	uk-ed-solutions.com	10/2010	Harry S Truman
controlledpharmacy.com	10/2010	Napoleon Bonaparte	ultram-buy.us	10/2010	Dr. Timothy Stevens
controlledx.com	10/2010	Napoleon Bonaparte	united-ed-solutions.com	10/2010	Harry S Truman
drugs-ed.com	10/2010	Napoleon Bonaparte	valium-online.org	10/2010	Harry S Truman
ed-pharmacy-store.com	10/2010	Napoleon Bonaparte	valiumbuy.us	10/2010	Dr. Timothy Stevens
extraqualitypills.com	10/2010	Napoleon Bonaparte	valiumnoprescription.us	10/2010	Dr. Timothy Stevens
generic-online-cheap.com	10/2010	Napoleon Bonaparte	viagra-australia.info	10/2010	Harry S Truman
generico-tramadol-italia.info	10/2010	Napoleon Bonaparte	viagra-pharma.net	10/2010	Harry S Truman
healthrefill.org	10/2010	Napoleon Bonaparte	wherebuypills.com	10/2010	Harry S Truman

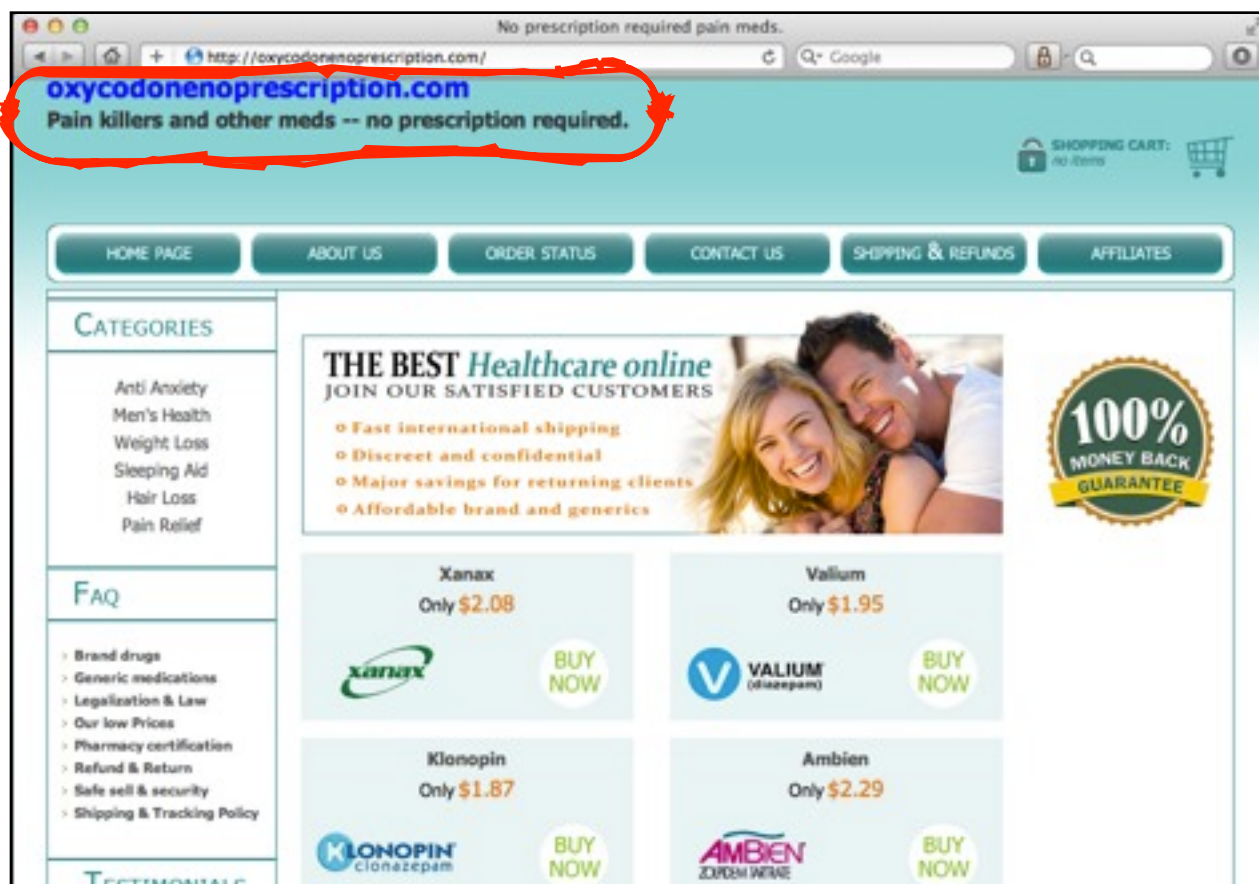
Consequently, we think it is more than reasonable to surmise that Internet.bs had no illusions as to our intent to use the domain names in furtherance of criminal activity.

VI. Setting Up Fake Online Pharmacy Content

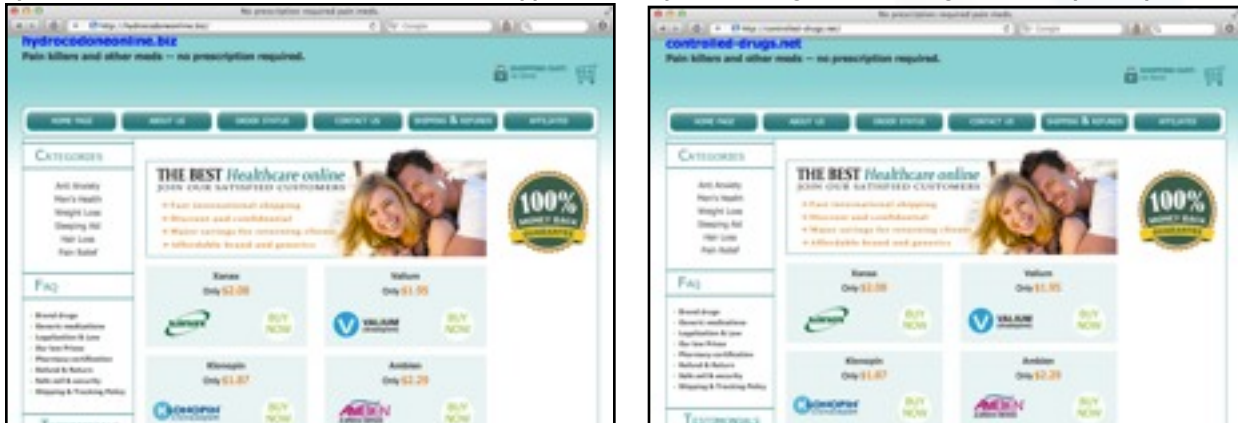
Having registered the domain names above (as well as a few hundred others), we set up fake online pharmacy content on a handful of the websites. We adopted two themes for our websites: first, no-prescription-required sales for controlled substances like Valium and Xanax; and second, the sale of what purported to be “genuine” anti-cancer medications. (Recall that we had already informed Internet.bs that we sold what appear to be genuine branded medications but are in fact our “own formulation” — in other words, counterfeit.)

Below are the reincarnations of three websites that were shut down as part of Operation Pangea and that we re-registered with Internet.bs: oxycodonenoprescription.com, hydrocodeonline.biz, and controlled-drugs.net. All explicitly stated, in several places on the page, that no prescription was required for the sale of drugs like Oxycodone, Xanax, Valium, Klonopin or Ambien.

Fig 10: Fake rogue Internet pharmacy, oxycodonenoprescription.com, that we set up with Internet.bs. The website clearly states that it sells prescription drugs without requiring a prescription.

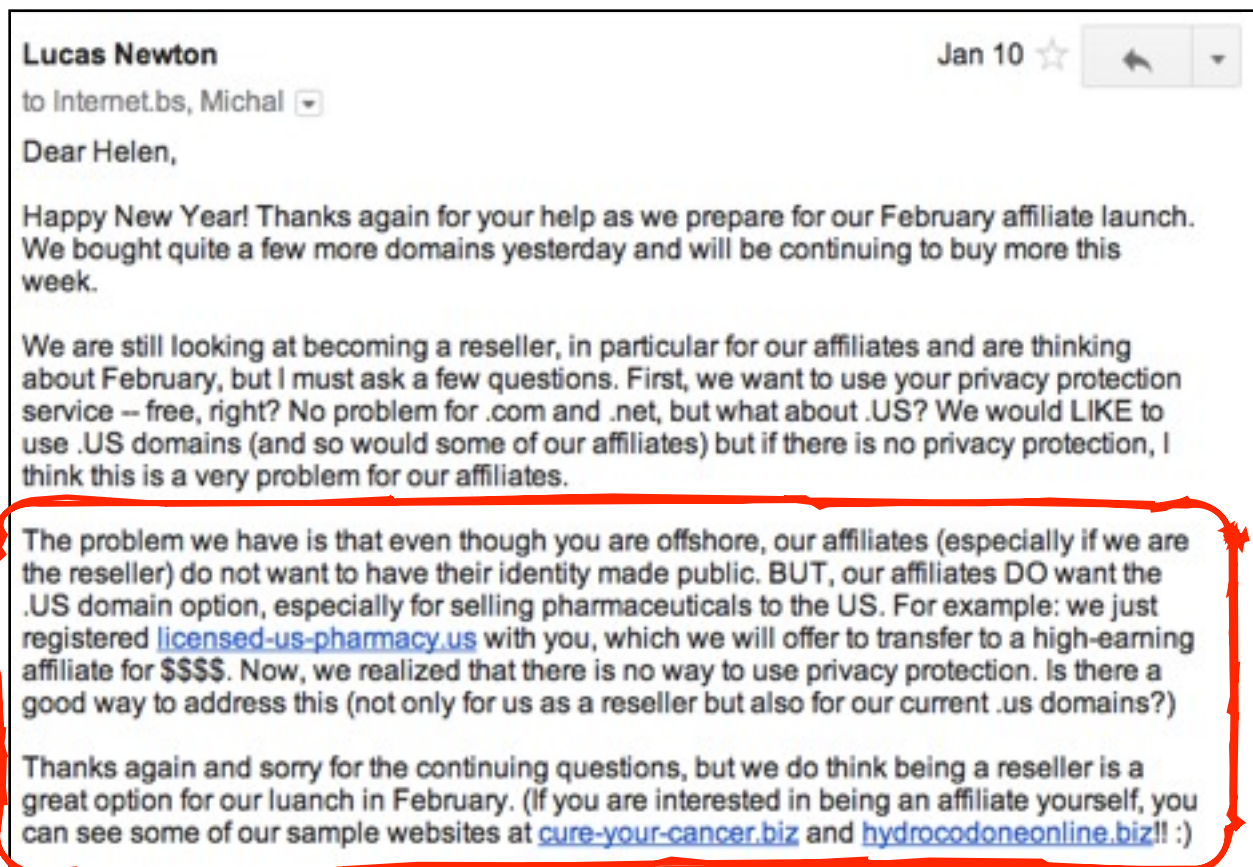


Figs 11 and 12: Two other identical rogue online pharmacies, hydrocodoneonline.biz and controlled-drugs.net, that we set up with Internet.bs. The websites were created to appear as if they were selling addictive drugs without a prescription.



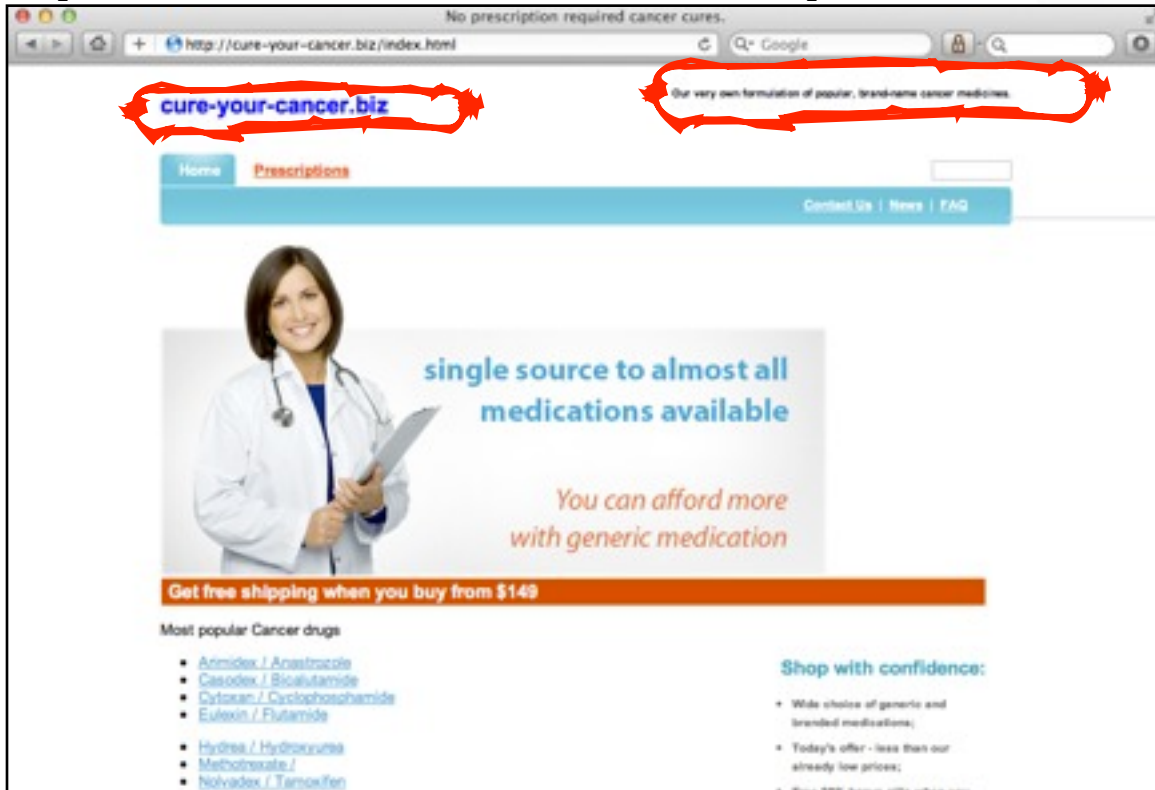
We subsequently emailed Internet.bs to show them the content on these sites, again giving them an opportunity to observe that our websites were selling controlled substances (addictive drugs) without a prescription. In the following email, we expressly showed them one of the websites above, hydrocodoneonline.biz.

Fig 13: Undercover email to Internet.bs, pointing them to our websites, which were online at the time. Note the reference to licensed-us-pharmacy.us, which we registered with Internet.bs after explicitly having told them we were not operating legally in the US.



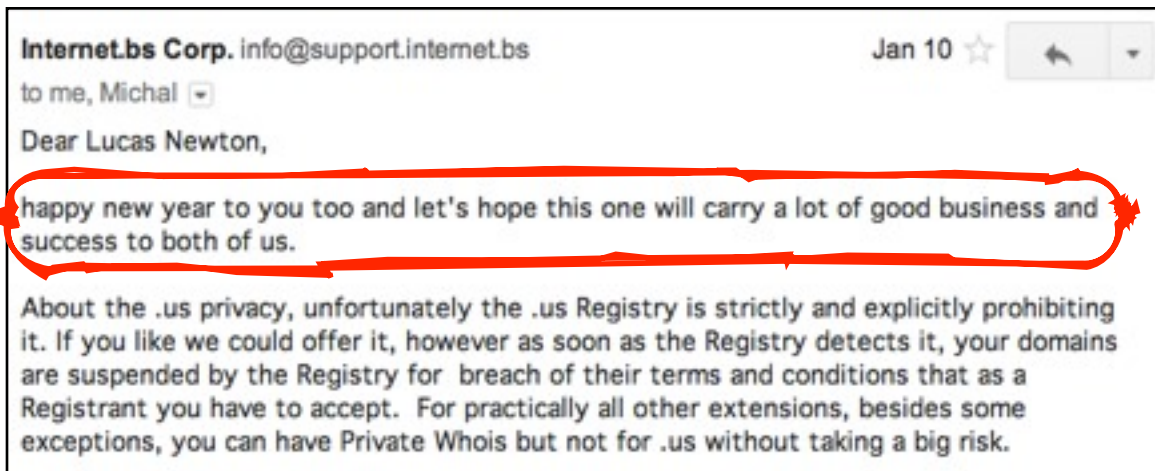
Also included in our email above was a link to our fake rogue Internet pharmacy cure-your-cancer.biz, which offered “our very own formulation of popular, brand-name cancer medications.” As noted several times in this report, we had already explained to Internet.bs that our drugs were our own formulation (or counterfeit) and our websites had been shut down by safety regulators before.

Fig 14: Fake undercover rogue online pharmacy cure-your-cancer.biz, which we registered with Internet.bs after telling them that our medications were our “own formulation” but marketed as genuine medical brands.



As before, despite showing Internet.bs our illegal websites, we received a reply from the company simply indicating that they hoped the coming year would “carry a lot of good business and success.”

Fig 15: email from Internet.bs, even after we pointed them to our seemingly illegal online pharmacies, wishing us success in the New Year.



In the interest of giving Internet.bs every conceivable opportunity to express concern about the illicit nature of our undercover websites, we finally emailed the CEO, Marco Rinaudo, again in an undercover capacity.

This time, our undercover email came from “Simeon Sanders,” sent from “one CEO to another.” We explained that we were preparing to register several thousand domain names with Internet.bs but that we needed to avoid scrutiny by the FDA and DEA. We additionally referred Mr. Rinaudo to hydrocodoneonline.biz and genuine-anti-cancer-drugs.com, both of which were active and online and posting the content above. We expressly told Mr. Rinaudo that it is “absolutely correct” that we don’t require a prescription for these drugs, and that “it is also absolutely correct that we have our own drug formulations, including for branded medicines, that have **not been approved by the US FDA or their EU counterparts.**” Our email to Internet.bs’ CEO, Marco Rinaudo, is below.

Fig 16a: Undercover email to Internet.bs CEO Marco Rinaudo, stating that we do not require a prescription for prescription drugs and have our “own drug formulations, including for branded medicines, which have not been approved by the US FDA or their EU counterparts.” (Continued on next page; split for formatting reasons.)

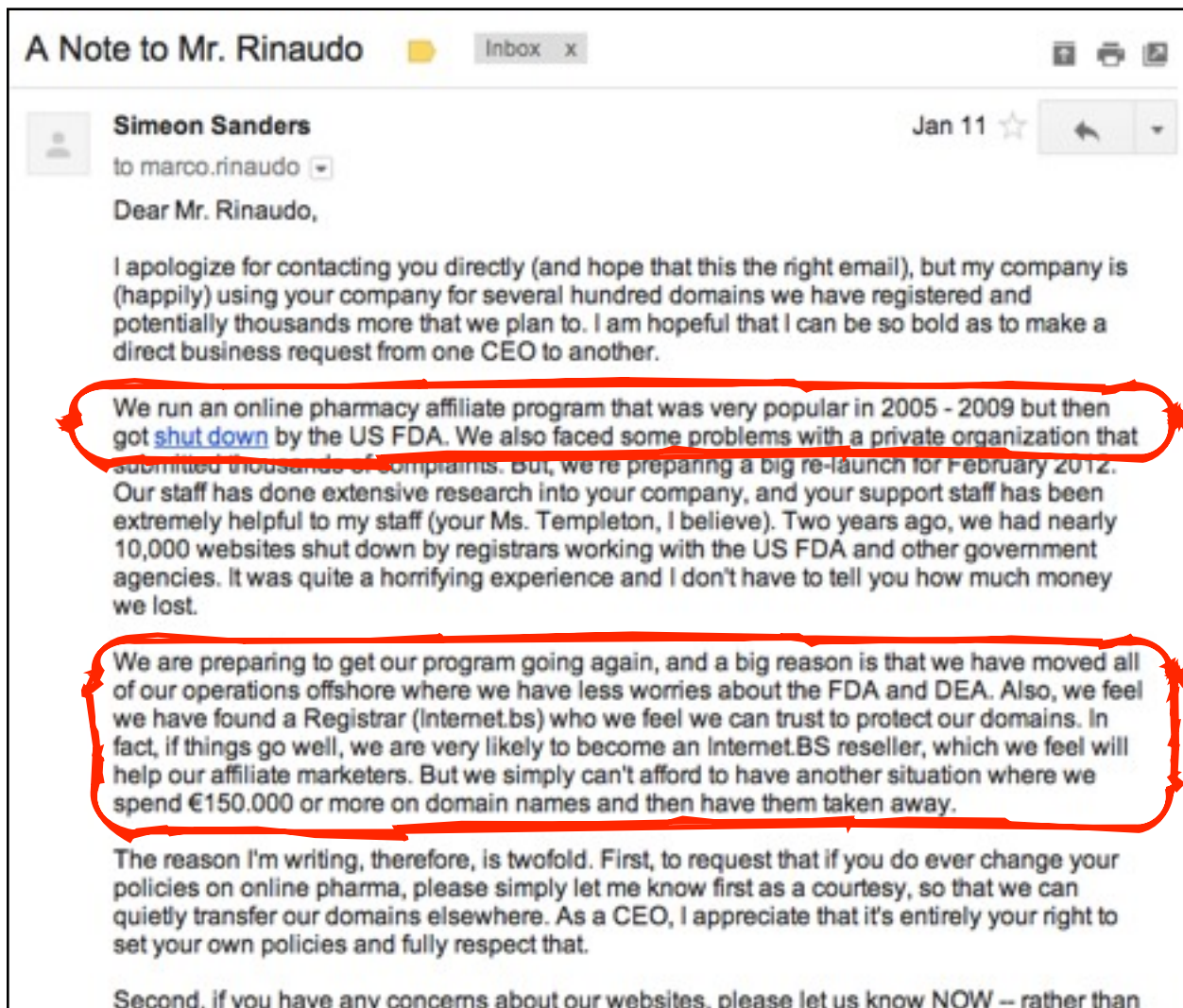


Fig 16b: Undercover email to Internet.bs CEO Marco Rinaudo, stating that we do not require a prescription for prescription drugs and have our “own drug formulations, including for branded medicines, which have not been approved by the US FDA or their EU counterparts.”

Second, if you have any concerns about our websites, please let us know NOW – rather than after we move forward and register thousands of Euro on pharma domains only to lose them. You can see samples of our websites at hydrocodoneonline(dot)biz and genuine-anti-cancer-drugs(dot)com. It is absolutely correct that we do not require a prescription for these drugs. It is also absolutely correct that we have our own drug formulations, including for branded medicines, which have not been approved by the US FDA or their EU counterparts. If you would prefer that we take our business elsewhere, I completely understand and will be happy to do so. However, please be assured that we never, ever spam or scam and our customers always receive a product (except when seized by Customs, which isn't our fault).

My sincerest apologies for the unsolicited email, but given the volume of business we plan to do with your company, I hope you can understand our position. I'm always at your immediate disposal if you have any questions about our activities. If not, we look forward to a long and happy relationship with your company that is hopefully profitable for both sides.

Thank you for your professional courtesies.

...

Simeon Sanders
CEO, Pay-Rx.biz Pharmaceuticals

In his reply to us, Mr. Rinaudo assured us that there would be no problem, stating that Internet.bs is the Registrar for “dozen (sic) of thousand of legal online pharmacies” and that Internet.bs’ “policy is not to accept court order or cease and desist request from outside” the Bahamas. Mr. Rinaudo also provided his personal cell phone, which, as a courtesy to him, is blackened out below, and even suggested using other name servers so that Internet.bs could argue that it is “only the Registrar” (and thus impliedly cannot do anything if it receives complaints).

Fig 17a: Reply email from Internet.bs CEO Marco Rinaudo, indicating no problem with our rogue online pharmacy domain name registrations.

marco.rinaudo@internet.bs via srs.bis6.us.blackberry.com

Jan 11

to me

Hi Simeon,

Your enquiry is very welcome. We are the Registrar of dozen of thousand of legal online pharmacies and our policy is not to accept court order or cease and desist requests from outside our Jurisdiction which is the Commonwealth of the Bahamas. We understand that you are legally entitled to sell products without prescription without breaching your local laws. As long as your business is legal in the country from where your are running it and it is not in breach of the Bahamas laws (which is extremely unlikely) you are very welcome to stay with us. In the unlikely event that we are forced to change our policies we are always allowing you to move your domains away unless they are blocked or transferred at the Registry level or if we receive an explicit order from a court under our jurisdiction preventing us from doing so.

I'll be pleased to assist you directly and you can reach me on my cell [REDACTED] in

Fig 17b: Reply email from Internet.bs CEO Marco Rinaudo, indicating no problem with our rogue online pharmacy domain name registrations.

I'll be pleased to assist you directly and you can reach me on my cell [REDACTED] in Panama. Feel free to call me taking in account the New York time as reference.

Just a small suggestion, to prevent extra pressure from our upstream providers (network operators) please avoid to use our nameservers, this way we will "merely" be you Registrar and as such we will only be responsible to apply ICANN rules and nothing more.

PS: I am sure that Helen already mentioned most of what I have just stated and I am pleased to confirm that we have nothing against legal businesses as yours.

Best regards,
Marco Rinaudo
Correo electronico generado desde un BlackBerry.

There is a wealth of information in Mr. Rinaudo's response. Let's break it down.

1. Rinaudo claims that Internet.bs is the Registrar for thousands of "legal" online pharmacies and goes on to expound on his interpretation of the legality of our pharmacies in what appears to be an attempt at covering himself in case of future scrutiny. Yet Mr. Rinaudo, and Internet.bs, have been notified multiple times over the past several years that online pharmacies like the ones we registered with them are unequivocally illegal. (Indeed, it is somewhat difficult to believe that Mr. Rinaudo actually believes that a website selling OxyContin without a prescription is actually legal, particularly when it was already shut down once before by the FDA and Interpol.)
2. Rinaudo says his company won't respond to court orders or cease and desist requests if they're not from the Bahamas, implying that he is under no obligation to respond to such requests. Again, untrue: what makes an online pharmacy legal or illegal isn't just about where it is operating from, but also where it ships prescription drugs to.
3. Rinaudo advises us to use other nameservers so that his company will be "merely" the Registrar and goes on to say that Internet.bs will be responsible to apply ICANN rules. Yet his company's Registrar Accreditation Agreement with ICANN states that the Registrar must not knowingly allow domains to be registered in the furtherance of illegal activity. "Merely" being the Registrar means that Internet.bs, just like every other ICANN-accredited Registrar, has the responsibility to disallow domains from using its services for the furtherance of illegal activity (which, again, is defined by the varying global jurisdictions, not Mr. Rinaudo).

But perhaps the most salient piece of information established by the email with Rinaudo is that the willingness of Internet.bs to serve as a safe haven for criminal activity is not an aberration, or the result of a single "rogue" employee. Rather, it is firm company policy — and goes all the way to the top.

VII. Playing Devil's Advocate: In Anticipation of the Defense

In this section, we consider and seek to address potential rationales or excuses that Internet.bs might provide in response to this report, if it chooses to respond at all.

Rationale 1: That Internet.bs didn't know our websites were illegal

Internet.bs, in response to this report, may claim that they did not or could not know that our websites were going to operate illegally. This excuse is very straightforward to refute.

Our communications to Internet.bs clearly said that we had already been shut down by the FDA and its international counterparts for selling drugs illegally over the Internet. We told them that we were selling OxyContin and Xanax, both controlled substances, without a prescription. We stated that the drugs were our "own formulation" but falsely marketed as branded medications. We expressed the need to hide our identity out of concern for being caught by law enforcement.

They responded to these emails, and said that there was no problem. Not only that, but they said they did not respond to court orders, and offered protection for pharma domains like ours.

Quite literally, we ran out of ways to explain all the different types of criminal activity our websites were involved in, and gave Internet.bs every opportunity to balk. Given the information above, it simply isn't plausible for Internet.bs to claim that they weren't aware our websites were operating illegally.

Rationale # 2: That our activity was only illegal in the US and EU, not the Bahamas

Internet.bs stated in a couple of emails that as long as they didn't receive an order from law enforcement in the Bahamas or our websites weren't violating Bahamian laws, then our websites were "legal" and there would be "no problem" — implying that whatever other countries might think, our rogue Internet pharmacies are actually legal in the Bahamas. In other words, that our activities were only a technical violation of the law in the US and EU and elsewhere.

This excuse fails for several reasons, many of which have already been outlined in this report. But let's indulge this flawed logic for a moment and ask ourselves: are online pharmacies that sell prescription drugs without a prescription, or that sell counterfeit drugs, actually legal in the Bahamas?

Internet.bs may wish to become familiar with the laws where it claims to be based. A quick review of The Pharmacy Act enacted by the Parliament of The Bahamas in 2009 tells us that online pharmacies have been completely outlawed in the Bahamas. Under Part VII: Sale and Administration of Drugs, The Act³⁰ states:

³⁰ <http://www.bahama-ads.com/BPC/pharmacyact.pdf>

(3) No person shall establish or engage in the practise of internet pharmacy in any form.

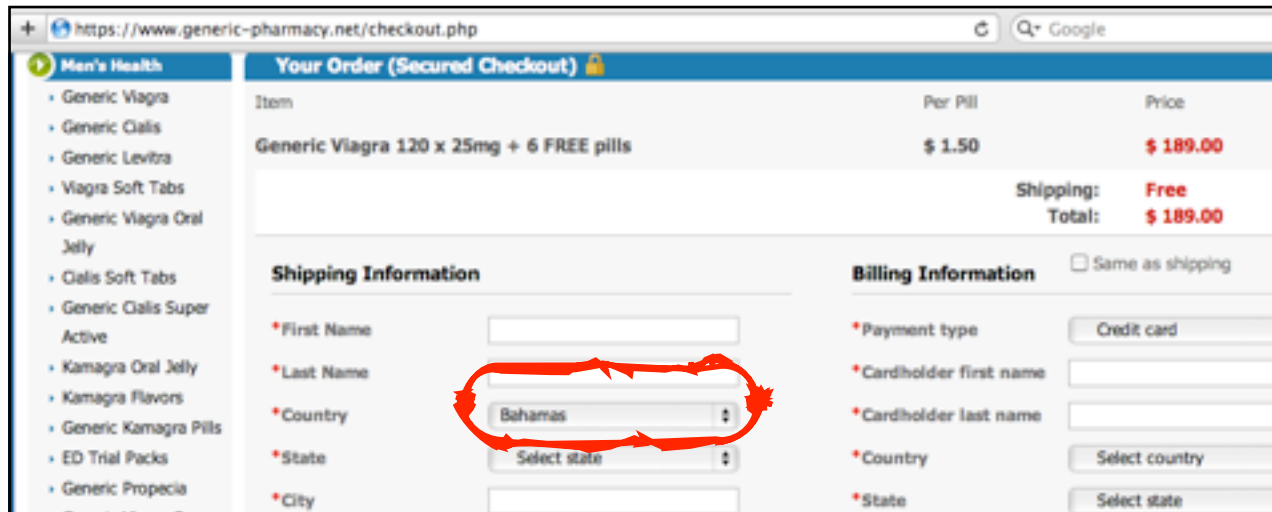
(4) A person who contravenes any of the provisions of this section commits an offence.

So, Internet pharmacies – rogue or not – are not allowed in the Bahamas under any circumstances. And in case one might be curious how The Act defines an Internet pharmacy, and whether domains of the type we reference in this report would fall into that category, see the definition from The Act below:

“Internet pharmacy” means a facility either within or outside The Bahamas, that dispenses or distributes pharmaceutical products by means of online mechanisms and whereby the person who dispenses the product has no direct physical contact with the medical practitioner or the person for whom the drug is intended.

And if you were wondering whether Internet pharmacies of the type we describe in this report offer to ship drugs to the Bahamas, the answer is Yes: of the thousands of rogue Internet pharmacies that are registered with Internet.bs, there are plenty that offer to ship to the Bahamas, all without a valid prescription. Consider one example of a major rogue online pharmacy, generic-pharmacy.net.

Fig 18: generic-pharmacy.net, registered with Internet.bs, offers to ship to the Bahamas, in violation of Bahamian law.



This effectively unravels Internet.bs' and Marco Rinaudo's argument that they are in a position to offer safe harbor because rogue online pharmacies are not illegal in the Bahamas. In fact, they are, and whether Internet.bs and Rinaudo knew that is largely beside the point.

Rationale # 3: This was entrapment!

Our undercover research wasn't entrapment. Consider the definition of entrapment provided in Black's Law Dictionary: "a law-enforcement officer's or government agent's inducement of a person to commit a crime, by means of fraud or undue persuasion, in an attempt to later bring a criminal prosecution against that person." In other words, "entrapment" is when a law enforcement agency coerces someone to do something that they wouldn't normally do. And, of course, LegitScript was not acting at the behest of a government agency.

In fact, sponsoring rogue Internet pharmacy domain names is something that Internet.bs is regularly doing. Just look at our data regarding Internet.bs' rogue Internet pharmacy market share: roughly 33% of the market, compared to its overall market share of 0.2%. Internet.bs, on its own and without any coercion, has done quite well at becoming a safe haven for Internet pharmacy crime. Or, look to the NABP's list of "not recommended" online pharmacies: Internet.bs is the Registrar for nearly 44% of the online pharmacies that are active. Indeed, in our first undercover communications with the company, it proudly indicated that it is the home for "thousand(s)" of pharma domains. Indeed, all the evidence suggests that this is a normal part of Internet.bs' business: given every opportunity to refuse to allow their platform to be used as an pharmacrime safe haven, they enthusiastically welcomed the business.

Rationale # 4: Internet.bs is "only the Registrar"

We raise this argument because of Internet.bs' suggestion that we avoid using its nameservers to conduct our illegal activity, so that it could claim that it is "only the Registrar" and does not need to disable the domain names.

First, we've already discussed the fact that Registrars are accredited, typically by ICANN, and must adhere to certain rules. These include requiring customers not to use domain names in furtherance of illegal activity. Internet.bs violated this rule, not only by permitting illegal activity but encouraging it.

Second, websites as a practical matter don't exist without domain names and domain names don't exist without Registrars. The Registrar is a major player in a website's ability to stay online.

Third, the use of Internet.bs' platform was central to our seemingly criminal motives: to register as many domain names as possible to sell illegal drugs.

Fourth, Internet.bs was in a position of profiting from our domain name registrations. It's one thing if a free service is being used in furtherance of criminal activity, but when it's a paid service, it takes on a new dimension, since the platform is then knowingly profiting from the proceeds of criminal activity.

Rationale # 5: Shutting down rogue Internet pharmacies would be a violation of free speech

Perhaps predictably, cybercriminals often try to hide behind concepts like freedom of speech when domain names engaged in counterfeit drug sales or other illegal activity are disabled. But selling drugs isn't a matter of free speech — it's just selling drugs.

In the offline world, there isn't a single country worldwide in which one has a "right" to sell prescription drugs — much less counterfeit ones — or sell drugs without a prescription or pharmacy license. To draw an analogy to the offline world, consider an individual who set up a "pharmacy" down the street from you without a pharmacy license or training and started selling counterfeit drugs and drugs without a prescription. Would you say that he or she had a free speech right to sell prescription drugs to you and your neighbors? No — you'd only want licensed, regulated pharmacies selling medicines. In the offline world, you have to get the appropriate training; pass a test to get a pharmacists' license; and adhere to safety and other requirements; without those things, no reasonable person would say that you can just set up a fake storefront and start selling jars of pills to cancer patients, claiming that it will cure their cancer. Letting cybercriminals — or, the domain name Registrars who partner with cybercriminals — hide behind free speech or Internet freedom in order to facilitate criminal activity only desecrates those principles, which are central to the future vibrancy of the Internet.

Second, Registrars are commercial entities; they profit from domain name registrations. Vocally expressing a commitment to Internet freedom is fine, but it's important to be clear-eyed about it: Registrars exist to make money. There's nothing wrong with that, but Registrars have an inherent tension between disallowing the use of their platforms in furtherance of criminal activity, which costs them money, and knowingly permitting it, which (as with Internet.bs) can be part of a revenue stream. Internet freedom is fundamental, but it's important not to let criminals (or the very few Registrars that help them) engaged in activities like child pornography, counterfeit drug sales and other dangerous activities hide behind "Internet freedom" every time their profits are threatened.

As we can see above, Internet.bs' argument that the rogue online pharmacy domain names it sponsors are legal in the Bahamas (or anywhere) is quickly unraveling. But there is one final nail in the coffin: despite Internet.bs' apparent attempt to rely on its "offshore" location in the Bahamas to justify its relationship with rogue online pharmacies, there is ample reason to question whether the company is actually in the Bahamas at all.

VIII. Internet.bs: Is Anybody Home?

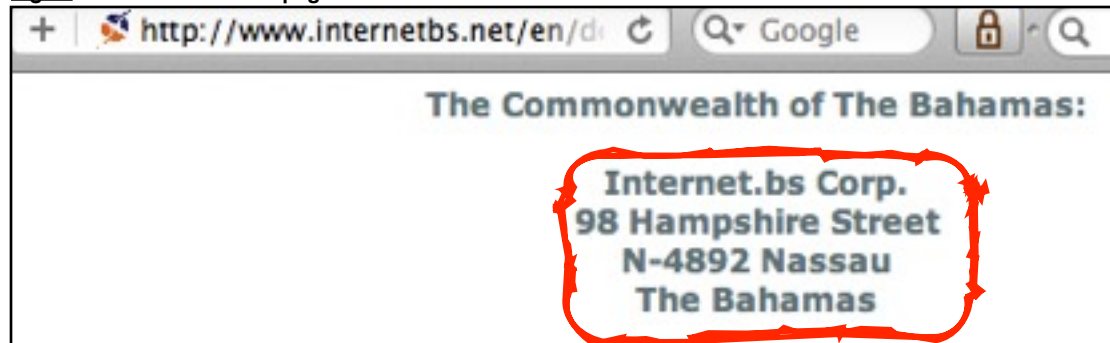
A February 2012 visit to Internet.bs' purported headquarters in the Bahamas revealed what appeared to be an unoccupied residential house with no mail service.

Fig 19: 98 Hampshire St., Nassau Bahamas — the address Internet.bs claims as its headquarters.



As background, both the Internet.bs website³¹ as well as ICANN's published information state that Internet.bs Corp. is principally located at 98 Hampshire Street in Nassau, The Bahamas.³²

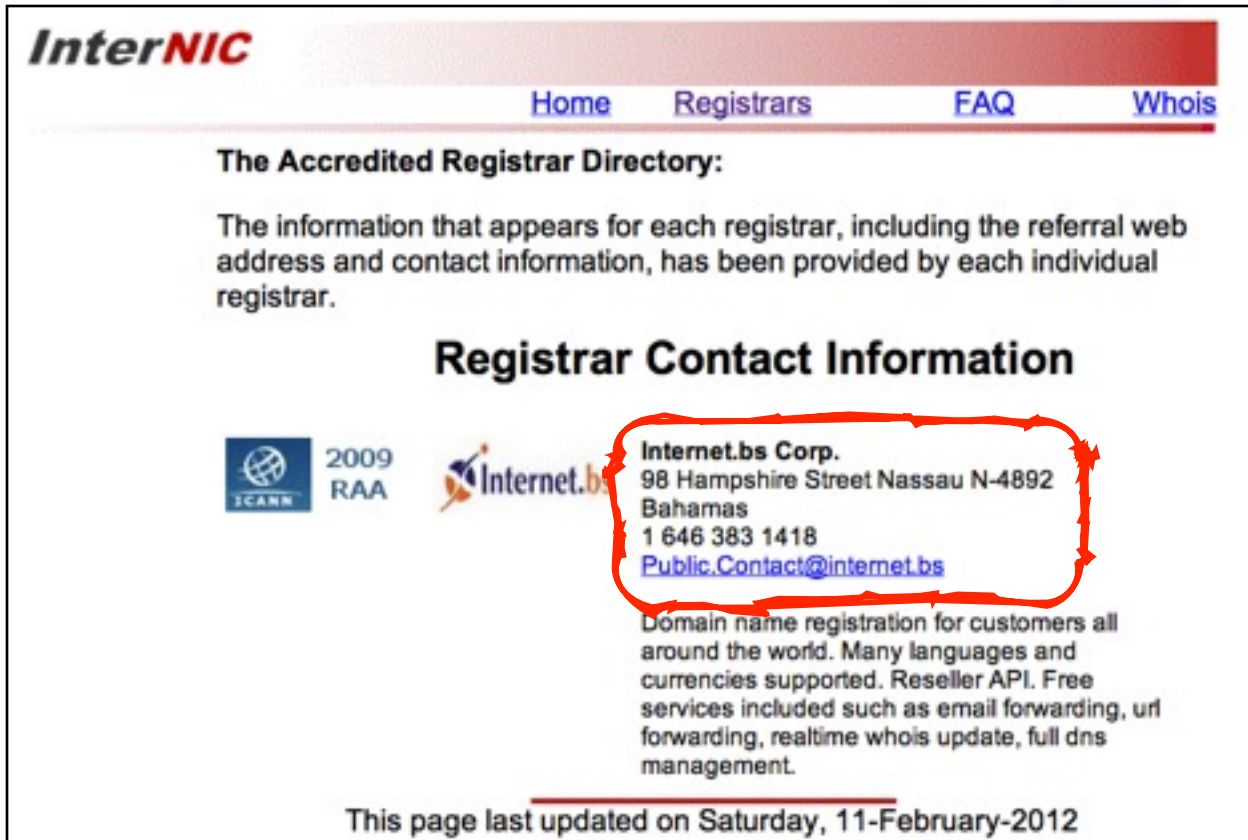
Fig 20: Internet.bs contact page.



³¹ <http://www.internetbs.net/en/domain-name-registrations/contact.html>

³² <http://www.internic.net/registrars/registrar-814.html>

Fig 21: ICANN Registrar directory, indicating that Internet.bs has informed ICANN that it is at the 98 Hampshire Street address.



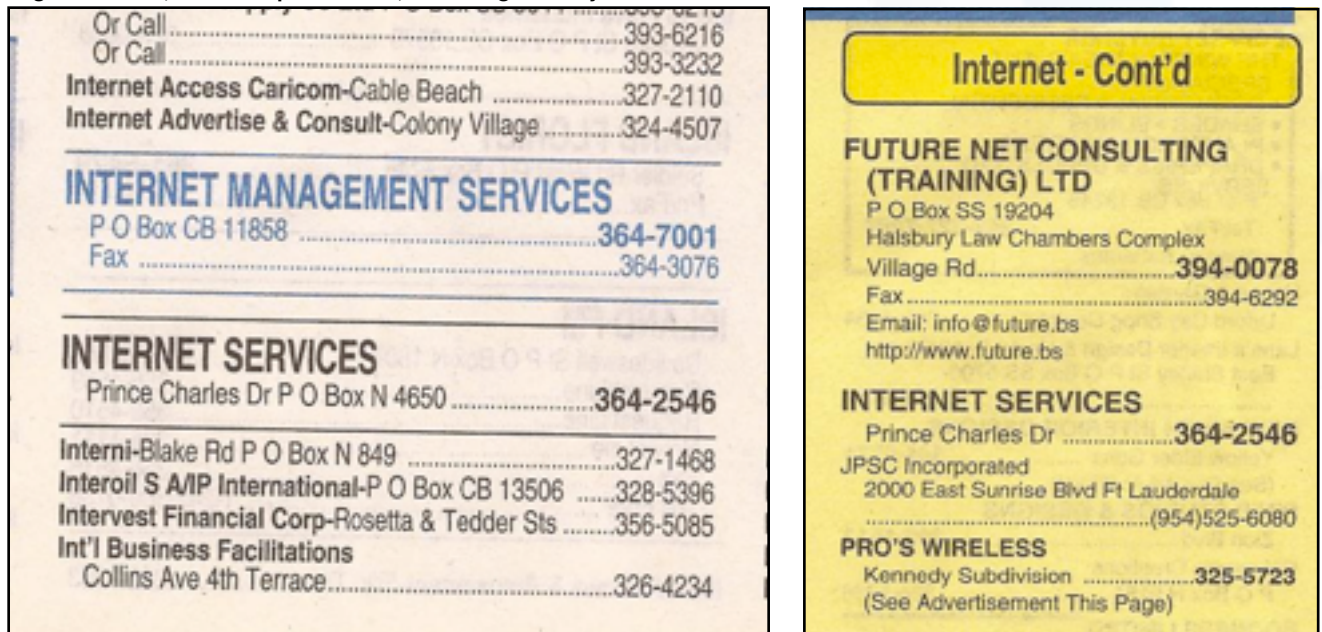
The screenshot shows the InterNIC website's "The Accredited Registrar Directory" section. It features a navigation bar with "Home", "Registrars", "FAQ", and "Whois" links. Below the navigation bar, there is a heading "The Accredited Registrar Directory:" followed by a paragraph explaining that the information provided for each registrar, including referral web addresses and contact information, is provided by the individual registrars. The main heading is "Registrar Contact Information". To the left of the contact information are logos for ICANN 2009 RAA and Internet.bs. The contact information for Internet.bs Corp. is highlighted with a red hand-drawn box and includes: "Internet.bs Corp.", "98 Hampshire Street Nassau N-4892", "Bahamas", "1 646 383 1418", and the email address "Public.Contact@internet.bs". Below this information is a paragraph describing their domain name registration services: "Domain name registration for customers all around the world. Many languages and currencies supported. Reseller API. Free services included such as email forwarding, url forwarding, realtime whois update, full dns management." At the bottom of the page, it states "This page last updated on Saturday, 11-February-2012".

However, a visual verification of the actual address suggested that it is simply a shuttered residential home. There were no signs of either commercial activity or even occupancy. There were no visible trash cans or cars parked in the driveway, in stark contrast to other homes on the street which had multiple cars and clear signs of habitation.

In fact, the driveway gate had a padlocked chain with a faded flyer placed in it. Still there in February, the flyer was a now-faded, mass-produced Christmas card for a local political candidate, suggesting that no one had accessed the driveway in weeks or months, since before Christmas 2011.

Moreover, a search of the local Nassau phone books showed no listing for a company called Internet.bs. Below are excerpts from the phone book where, if it were listed, Internet.bs would appear:

Fig 22: Nassau, Bahamas phone book, indicating no entry for Internet.bs.



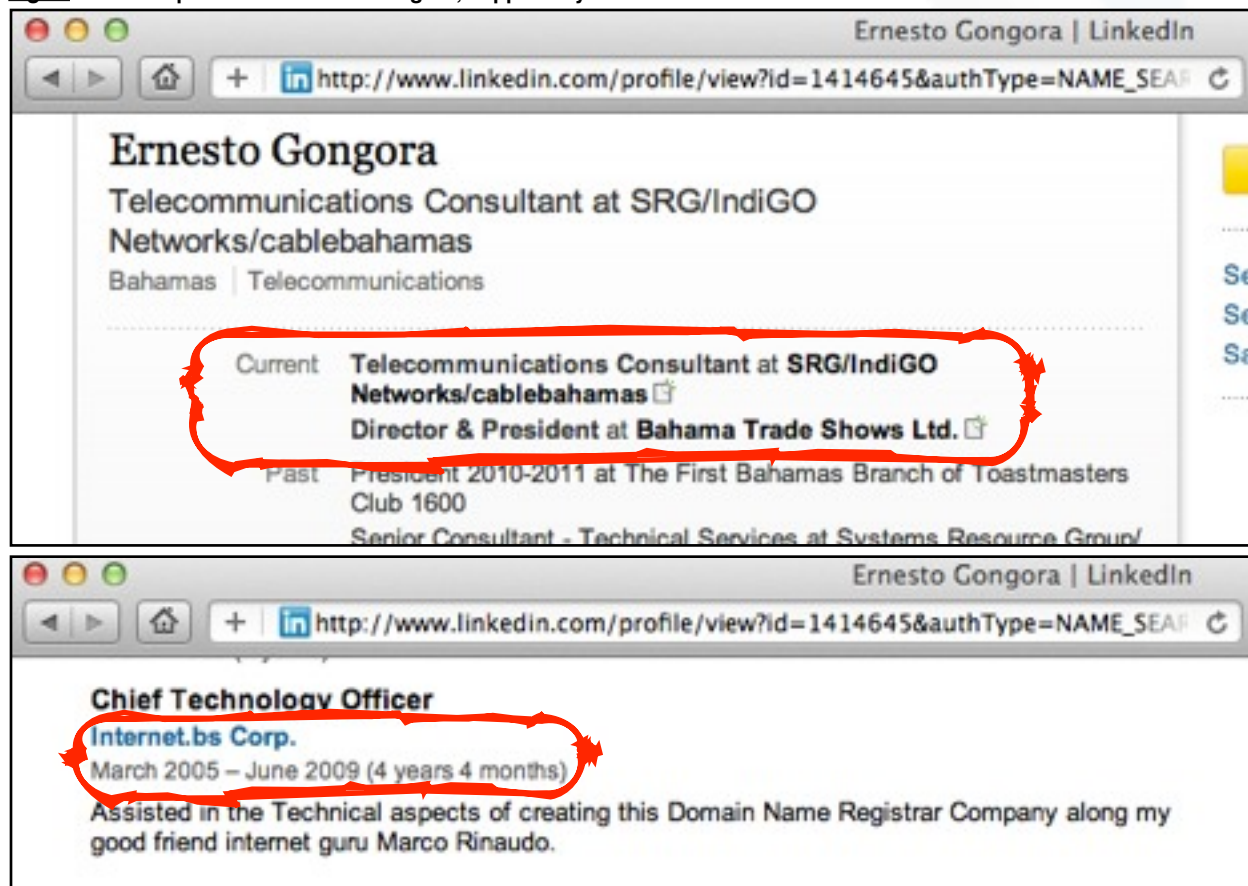
It may well be true that Internet.bs is a registered corporation in the Bahamas. But anyone can set up an offshore company in the Bahamas: literally dozens of websites offer non-Bahamians the ability to quietly form an “offshore” Bahamas corporation, typically for the purpose of tax evasion or even money laundering. The question is, is that *really* where the company and its employees are operating the company from? We can’t say for sure, at least as to all of the individuals identified as employees on Internet.bs’ website.³³ However, it appears from their various publicly accessible profiles that most of them are either in Panama or elsewhere, or are not primarily employed by the company. (Marco Rinaudo, the President, already indicated to us that he is in Panama and provided us with a Panamanian phone number). One of the individuals, Ernesto Gongora, does appear to physically reside in the Bahamas, as does another individual identified as an employee, Irma Trevino. But Ms. Trevino indicates on her Facebook page that she works at Queens College in Nassau — not at Internet.bs. And Gongora’s LinkedIn profile states that he left Internet.bs in 2009.³⁴ His Facebook page also indicates that he now works for Cable Bahamas. Despite this, nearly three years later, he remains identified, apparently incorrectly, on the Internet.bs website as one of their employees. The individual who identifies himself as the head of Internet.bs’ technical department, Pavel Ciocan, isn’t in the Bahamas — but rather,

³³ <http://www.internetbs.net/en/domain-name-registrations/aboutus.html>. It does appear that some of the individuals, such as Norbert Stocker, have historical connections to The Bahamas. Even Stocker, however, who remains named on Internet.bs’ page as an employee, appears to be primarily located in Panama where he works for a different company, Financial Services, that specializes in managing “offshore wealth” yet is named as involved with several companies, such as globalmineralresources.com.

³⁴ The link is a bit lengthy but can be accessed [here](#).

Romania.³⁵ A new employee, Giuseppe Grillea, identifies himself simultaneously as being in the Bahamas yet also in Seattle, Washington.

Fig 23: LinkedIn profile for Ernesto Gongora, supposedly the CTO of Internet.bs but who indicates he left in 2009.



It may be that Rinaudo previously resided in the Bahamas, he may even still own property there, and the company may be registered in the Bahamas. But as far as we can tell, only two of the individuals identified on Internet.bs' employee page actually reside in the Bahamas — and both of those individuals now claim to work elsewhere.

Consequently, it is difficult, given the information above, to view the company's Bahamian connection as anything more than as a shell company, and not truly representative of where the day-to-day activities actually take place. Of course, Panama is also known as a safe haven of sorts for money laundering and financial crime, so ultimately, it may make little difference if the actual day-to-day operations are in the Bahamas or Panama — but at the very least, Internet.bs should be transparent about where it really exists, as ICANN requires. Given the company's continuing marketing of itself as being "offshore," it is difficult to see its selection of the Bahamas as anything more than a mechanism to help protect websites engaged in illegal activity.

³⁵ <http://www.linkedin.com/pub/pavel-ciocan/12/867/a34>

Conclusion

This report is intended to provide a choice for ICANN and registries that have accredited Internet.bs. There is now wholly credible, indisputable evidence that Internet.bs, a small Registrar with only 0.2% of the overall domain name market, is willingly serving, for profit, as an offshore safe haven for roughly a third of one particularly insidious and dangerous type of cybercrime: domain name registrations for websites that facilitate the sale of prescription drugs without a prescription, including addictive drugs like Vicodin, as well as counterfeit drugs. The clarity of this evidence takes two forms: first, a continuing, pervasive trend in which Internet.bs, despite having a small fraction of the overall domain name market, has hundreds of times higher market share in a major illicit market; and second, the direct evidence of Internet.bs' own emails to us establishing its willingness to serve as an offshore, safe haven for Internet pharmacies selling counterfeit drugs and addictive medicines without a prescription.

ICANN's first reaction may be that Internet.bs hasn't been convicted of any crime, and can't or shouldn't be de-accredited until and unless it is. That position is not merely incorrect, but would also be welcomed by cybercriminals for a couple of reasons. First, Internet.bs is violating the Registrar Accreditation Agreement (RAA) and related agreements by knowingly facilitating criminal activity. Indeed, the company is playing a dangerous game of abusing its privilege to self-regulate by openly touting its ability to help protect criminal entities' activities. Second, it would appear that the express purpose for Internet.bs' location — as an “offshore” locale, the Bahamas, compounded by the fact that at least some of its staff (including its CEO) resides outside of the Bahamas — is an attempt to reduce the risk that it will ever be convicted of anything. That's why, at a fundamental level, this isn't a decision that ultimately falls to law enforcement agencies in any one country seeking to exercise long-arm jurisdiction. Rather, this is a decision that ultimately must fall to ICANN as the world's primary accrediting body for Registrars. We believe that ICANN can, and should, deaccredit Internet.bs as a Registrar.

Whatever ICANN chooses, it will be an important precedent — a test case of sorts for cybercrime. The Bahamas isn't the only offshore location in the world. If ICANN turns a blind eye to the information in this report, in the long term, there will be little that can be done about rogue Internet pharmacies and other types of cybercrime: criminal organizations will partner with (or set up their own) Registrars in offshore locations, being careful not to violate the law in that jurisdiction so that they can run amok by sending counterfeit drugs, other fake goods, viruses and who-knows-what-else to the rest of the world, all the while protesting that the websites are not violating the laws of the offshore jurisdiction where they are registered as a corporation. (Here, it is worth noting again that Internet.bs' CEO, Marco Rinaudo, does not even reside in the Bahamas, but rather in Panama, so on the off-chance that the Bahamian authorities did seek to enforce their laws against him, he wouldn't even be in *their* jurisdiction.) ICANN insisting on a conviction in a jurisdiction known as being “offshore” would be akin to waiting for Godot.

Or, ICANN can take swift and decisive action against Internet.bs. This would also set a precedent. While Registrars can and should be able to exist in any country, there is a critical qualitative distinction between an individual or company already in the Bahamas that decides to become a Registrar for normal business reasons, and a Registrar that utilizes the Bahamas or another offshore location with the knowledge that it is facilitating and profiting from cybercrime. Here, ICANN has the opportunity to send a message to Registrars: the Registrar Accreditation Agreement and Uniform Dispute Resolution Policy mean what they say, and small jurisdictions aren't an excuse to serve as safe haven Registrars for criminal activity that targets other jurisdictions.

ICANN has said, on multiple occasions, that it isn't a law enforcement agency. Of course not. But it is a party to a contract (the Registrar Accreditation Agreement), and has the contractual right to enforce the provisions of that contract. That contract requires Registrars to adhere to applicable laws, and by incorporating the UDRP by reference, also requires Registrars to prohibit their customers from engaging in unlawful activity. The choice before ICANN is whether it will permit Registrars who sponsor, and knowingly permit their own customers to engage in, criminal activity to be exempt from those requirements, thus continuing the cycle of cybercrime.

There is sufficient precedent for deaccreditation. ICANN has deaccredited Registrars for a variety of reasons in the past, including insolvency,³⁶ failure to provide public access to WhoIs records,³⁷ and most pertinently its deaccreditation of EstDomains, described in several news stories as "cybercrime friendly."³⁸ (Note that EstDomains' CEO, Vladimir Tšaštšin, was finally arrested in November 2011 for cybercrime activities.³⁹)

Registrars, ISPs, search engines, registries, and the Internet community generally have vocally decried legislative or regulatory attempts to expand government control over the Internet, accurately noting that the Internet has thrived because it is autonomous and not operated or controlled by governments. But this only underscores the importance of voluntary self-regulation, not merely by individual Registrars, but also by the Registrar community as a whole. Vacuums want to be filled: if ICANN and the Registrar community do not step up to firmly deal with cybercrime-friendly Registrars in their midst, it is inevitable that government authorities will seek to do so; if jurisdictional constraints make that difficult, governments will inexorably seek expanded authority and new tools. If the Internet community hopes to prevent that, it must insist that ICANN enforce its existing code of conduct against Registrars, like Internet.bs, who willingly serve as platforms for cybercrime.

³⁶ <http://www.icann.org/en/correspondence/burnette-to-steinberger-30sep10-en.pdf>

³⁷ <http://www.icann.org/en/correspondence/burnette-to-friedman-30jul09-en.pdf>

³⁸ <http://www.zdnet.com/blog/security/cybercrime-friendly-estdomains-loses-icann-registrar-accreditation/2089>

³⁹ <http://www.fbi.gov/newyork/press-releases/2011/manhattan-u.s.-attorney-charges-seven-individuals-for-engineering-sophisticated-internet-fraud-scheme-that-infected-millions-of-computers-worldwide-and-manipulated-internet-advertising-business>

Appendix A: Methodology and Definitions

This section addresses three questions. First, what criteria did we use to classify online pharmacies as “rogue” for this report? Second, how did we get the data we used to assess market share, and how did we verify it? Third, how did we calculate Domain Name Registrars’ market share related to rogue online pharmacies, particularly with regard to spam Internet pharmacies that may have only been online for a few hours or days, and Registrars like GoDaddy that may have a few hundred rogue Internet pharmacies at any one time (which is inevitable, given GoDaddy’s overall share of the domain name market) but that quickly identify and disable them?

1. Defining “Internet Pharmacy” and “Rogue”

LegitScript designates a website as an Internet pharmacy if its sole or primary purpose is to sell or facilitate the sale of a prescription-only medicine.

The NABP recognizes an Internet pharmacy as “rogue” if it “violates, appears to violate, or encourages or facilitates violation of any federal or state law or regulation,” or if it “(d)oes not adhere to accepted standards of pharmacy and/or medicine practice, including standards of safety.” We adopt this definition as well. In this context, “rogue” essentially means “not being in compliance with applicable laws.”⁴⁰ Hence, this definition is not limited to the US — drug safety laws differ, but are fairly universal in requiring a prescription for prescription-only medicines and having some sort of drug safety regulations. The problem is global; LegitScript requires that online pharmacies adhere to applicable laws and regulations where they seek to dispense prescription drugs, irrespective of the jurisdiction in question.

LegitScript is conservative in applying this definition. First, if there is any possibility that an online pharmacy can reasonably argue that it exists for a primarily legal (or even grey-area) purpose, we have declined to classify it as “rogue,” thus giving every benefit of the doubt to online pharmacy operators. Second, if the legal violation is fairly minor or fixable and does not appear to denote intentionally illegal behavior, we do not classify the website as “rogue.” In both cases, such websites receive an “unapproved” classification but are not designated as “rogue” for the purposes of this report.⁴¹ Because Internet.bs is also the Registrar for many “unapproved” online pharmacies, this was another factor in our methodology that actually gave Internet.bs the benefit of the doubt.

For the purposes of this report, we intentionally excluded “spam” online pharmacies, which in most cases are registered in the thousands, have a very short life and are manifested at multiple Registrars worldwide before being shuttered hours or days later.

Of course, our undercover domains were not counted toward Internet.bs’ rogue Internet pharmacy website tally.

⁴⁰ A common tactic used by illicit online pharmacy operators is to base operations in an offshore jurisdiction (e.g., a Caribbean island); ship drugs everywhere except that jurisdiction; and then argue that they are not operating “illegally” because they aren’t violating the laws of the jurisdiction where they physically exist.

⁴¹ A good example here is a website that is doing everything right, except that it has failed to implement appropriate privacy protections for its customers — a problem, certainly, but not one that necessarily denotes intentional criminal behavior. This website would be classified as either “unverified” or “unapproved,” but not “rogue.”

2. Methodology: How we Verified the Data

LegitScript's team of analysts manually reviews websites collected via a number of automated processes. No website is ever classified as a rogue Internet pharmacy in LegitScript's database without a human-level manual review.

On an ongoing basis, LegitScript's staff re-reviews websites in our database classified as "rogue" Internet pharmacies. In particular, during October, November and December 2011 and January 2012, LegitScript staff conducted a comprehensive, manual review of the websites in our database classified as rogue to identify any that appeared to have changed content or that were no longer illicit in nature.

In other words, all rogue Internet pharmacies were reviewed on at least one occasion (and typically more than once) both with respect to the Internet pharmacies classified as "rogue" registered with Internet.bs, as well as those with other Registrars (whose data of course reflected overall market share). While some websites inevitably change content or go offline (et cetera) over time, these reviews mostly occurred within the three-to-four months preceding the release of this report.

LegitScript's data linking rogue Internet pharmacies to Registrars is at the most seven days old at any one time (that is, the Domain Name Registrar for each website was queried, at most, a week earlier).

With respect to the NABP's list of "not recommended" online pharmacies, we did not conduct our own review of the websites to evaluate whether we agreed with the assessment or not. Our automated process identified which of the 9,000+ websites were online, and for those websites, identified the Domain Name Registrar.

3. Domain Name Registrar Market Share: Normalizing Spam and Compliant Registrars

In assessing which Registrars have the most rogue online pharmacy market share, a few obvious questions emerge about our methodology.

First, is LegitScript's database complete enough to provide a reliable estimate of Registrars' online pharmacy market shares? After all, if LegitScript's data set contains 95% of the world's Internet pharmacies, that's a good cross-section to use for analytical purposes. But if it only includes 10%, additional information would be needed to conclude that the data set is good enough to use for analysis.

As noted in the introduction, LegitScript maintains the world's largest database of online pharmacies. Our database automatically queries each website's Domain Name Registrar, and our database collates the information, allowing us to determine which Registrars are the primary sponsors of rogue Internet pharmacies.⁴² In other words, the processed is automated, reducing human-level errors.

LegitScript estimates that we have at least 90% of the world's online pharmacies that are actively operating in our database at any one time. This is based on daily sweeps we conduct on multiple platforms (e.g., search engine

⁴² We follow standard DNS querying procedure in obtaining Registrar information. Interested parties can find out more about how "Whois" information, including Registrar identification, is available at <http://en.wikipedia.org/wiki/Whois>.

results analyses, analysis of the Internet community's queries of our database, social media analyses), and our subsequent identification of those not yet in our database. LegitScript also monitors new domain name registrations on a daily basis and monitors "high-risk IP addresses" and name servers. Combining these with multiple other information sources, LegitScript processes an average of 7 million results a day from which results most likely to be online pharmacies are reviewed and classified by a team of analysts, with hundreds of new online pharmacies added to or reclassified in LegitScript's database each day. In short, the substantial majority of rogue online pharmacies we encounter are already in our database (other than, of course, newly registered websites).

There is an obvious caveat to this: spam. As we stated in the introduction, this report is explicitly intended to be about rogue Internet pharmacies not engaged in spam. Spammy websites like e3a09b75bca.lovingseven.ru may have a life of a couple of days, or just hours, before being disabled by a Registrar or ISP. But they are also registered (and shut down) by the thousands. Should this be weighted the same, for Domain Name Registrar market share, as a website that doesn't engage in spam, seeks to have a longer shelf-life, and is online and operational for several months or years?

We think not, for a couple of reasons. First, once a website is taken offline, it isn't an Internet pharmacy any longer (at that point, it isn't anything). A website that is only online for a few hours or days isn't going to be as visible or have the same impact as one that is online for months. Second, spam websites are typically registered and then shut down in the thousands. If you include spam Internet pharmacies in the calculation, you can have a single Registrar who received tens of thousands of domain name registrations in a single day swiftly shoot up to being the leading sponsoring Registrar for spam Internet pharmacies, and then drop back down again within a matter of hours. But this doesn't denote *knowing* cooperation on the part of a Registrar. Indeed, what this report attempts to measure is the *knowing* facilitation and cooperation on the part of a Registrar. The bulk registration of thousands of spam online pharmacies which are subsequently shut down within hours or days thus does not fall into the category of the type of Registrar behavior this report seeks to evaluate.

There's another subtle but very important qualitative difference, and it's illustrated in Internet.bs' own business strategy related to pharma websites: to be a stable, supportive presence for "pharma domains." By definition, spam Internet pharmacies are not stable, and we haven't observed any particular problem with Internet.bs and spam. Indeed, Internet.bs explicitly warned us that it would not tolerate spam — but again, this means that the Registrar was focused on the method of delivery, not the actual activity resulting in danger to human health. In other words, the rogue online pharmacies that are the subject of this report are doing the exact same types of things that are dangerous to human health as spam online pharmacies (and are often part of the same criminal network) — selling unapproved drugs, not requiring a prescription, lacking required pharmacy licenses — they just aren't using spam to conduct marketing. But as noted earlier in this report, the absence of a spam-based marketing campaign doesn't mean that an online pharmacy is safe and legal. Accordingly, the purpose of this report is to focus on rogue Internet pharmacies not engaged in spam, and Internet pharmacies that we knew of as only having a shelf-life of a few days or hours were not calculated in our overall totals.

The second, similar issue is how we dealt with rogue online pharmacies that were registered with a company like GoDaddy or eNom that actively prohibit the use of their registration platforms in furtherance of criminal

activity. Because of these two companies' sizes, it is inevitable that there will always be some number of rogue online pharmacies on their platforms. These are typically quickly identified and disabled, usually within days. Again, we think that there is a difference between a rogue online pharmacy quickly identified and disabled by GoDaddy within a matter of days or weeks, and one that remains online for months or years with Internet.bs. The difference, of course, is that one of these companies is a safe haven Registrar for cybercrime and the other is not. To address this, we "normalized" the data by assuming that compliant Registrars always had anywhere from a few hundred rogue Internet pharmacies (in the case of the largest Registrar, GoDaddy) to a few dozen (for smaller Registrars that quickly identify and disable rogue Internet pharmacies, such as Dynadot or Sibersname), simply to give Internet.bs the benefit of the doubt wherever we could.

Given these normalizations, it's extremely important to emphasize that the market share estimates aren't intended to be exact. That isn't to say that we don't stand by the assessment within a few percentage points — we do. But there is some "room" around our estimate that Internet.bs' share of the domain name market is 33% — it could be a few percentage points higher or lower. However, for the purposes of this report, it doesn't much matter, for the following reasons. First, whatever the margin of error in our Registrar market share estimates — we think it is probably two or three percentage points — Internet.bs is far outside of it, with an estimated 33% market share of all rogue online pharmacies, compared to its natural market share of 0.2%. In that light, it frankly doesn't matter whether Internet.bs' rogue Internet pharmacy market share is 25% or 50%: either way, Internet.bs is serving as a safe haven for rogue online pharmacies and is most certainly the leading safe haven for rogue online pharmacies among Registrars. Second, if anything, our estimate is conservative, given the fact that 43.9% of the "not recommended" online pharmacies listed on the NABP's website are registered with Internet.bs.

Finally, we actually tried to give Internet.bs every reasonable advantage in our calculations, and we think that the company's actual share of the rogue online pharmacy market is probably significantly higher: the 33% figure cited in this report represents our attempts to give Internet.bs the benefit of the doubt in every way possible. Any Internet pharmacies that were confirmed to be operating illegally in some respect, but that might have had a plausible claim to legality in some jurisdiction, were not designated as rogue, but rather merely as "unapproved" and were not included in our market share calculation. If it had been, it appears that Internet.bs' market share of rogue Internet pharmacy domain names would be even higher. As such, LegitScript stands by our assessment that Internet.bs is the world's largest safe haven for rogue Internet pharmacy domain names engaged in pharmacrime.