Communications Tips
For Travel Around the World
by
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Your Tool Chest

There are three tools that you should get familiar with before you travel: SMS, Skype, and VSee. There are many other tools that provide similar features. These are the ones that are already in widespread use at the Seed Company, and which experience has proven actually work in the emerging world.

SMS – Traditional SMS mobile phone texting is still the best solution for the broadest availability, to send and receive communications anywhere in the world. 98% of all humans live within coverage areas; > 5.5 billion humans (75%) have a phone supporting SMS. It's not fancy, but it works and most people with mobile phones use it. Delivery is not confirmed, but is generally reliable.

Skype – For audio and video, Skype is king; it works over poor Internet conditions, degrades nicely as Internet conditions worsen, and deals with intermittent Internet calmly and rationally.

VSee – VSee does a great job at multi-person team meetings. When Internet is not good enough for video, calls can fallback to audio easily. It tolerates some degree of Internet unreliability acceptably, but not to the same extent as Skype. Its use is disabled over TSC BGAN satellite technology.

Most communication is insecure, despite various marketing claims. If you need secure communications, please contact Field Solutions for additional consultations.

Get a SIM As Soon As You Arrive

Mobile phones require a tiny chip called a SIM, which is used for billing purposes. It usually costs less than $5. Until you have a local SIM, your phone will not work, even for placing calls. Some US plans will allow you to use a roaming SIM, but the rates tend to be exorbitant in the emerging world.

You can ask your hosts to provide a loaner SIM for a few days while you are there. This provides you

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2 This is referring to normal mass-market consumer Skype. Skype for Business, formerly known as Lync, is a completely different product and is not recommended for emerging world Internet.
with immediate access to local calling, which is an important safety benefit.

If you travel extensively, contact Field Solutions for information about a SIM card which provides both outgoing voice calls and an American phone number which works broadly throughout most of the world. In some countries, a phone will auto-configure for Internet access using a new SIM correctly within about ½ hour of putting the SIM into the phone. In others, an all-afternoon trip to the local carrier office is required.

**Tech Advice:** Frequently, the only thing the carrier will do is set the APN settings correctly; these settings' values can usually be found online. On Android phones, the APN settings may be set manually under “Settings|Mobile network settings|Access Point Names|your carrier”. Often, only “APN” and “MMSC” need modified. Select the APN as Active, and turn Airplane mode ON and then OFF.

**TIP:** Robert Soult’s *Offline SIM APN Database Pro* is an Android App that contains correct APN settings for most carriers and locations. It does not require Internet access.

## Regular Communications

Why are some leaders able to travel constantly and yet still take care of complex business, while other managers’ minions dread their travel schedule, knowing that deadlines will zoom by without feedback or approvals? Effective leaders set realistic communications expectations. They meet on a regular weekly basis with their direct reports, regardless of their travel schedule. They handle critical path items even when they are on the road and it's inconvenient.

When traveling in the emerging world, plan on devoting ½ day to trip activities and ½ day to keeping the team functioning smoothly and dealing with email, crises, etc. on the home front. Infrastructure challenges are huge and in many parts of the world, life just takes significantly more time and energy. Try to have one major goal or TODO for each of three parts of each day: morning, afternoon, and early evening.

**Use SMS text messaging for brief ad hoc interaction, and Skype for one-on-one communications.** For team meetings or meetings with multiple people, choose VSee. If you need secure communications, contact Field Solutions for additional assistance.

Email is often an effective communication tool because it can work over poor Internet by drips and drabs. Alternately, email can be checked over a good connection, then responded to while disconnected from the Internet; outgoing emails may be queued up and ready to send when Internet becomes available.

Email may be configured to preview only the start of a large message, downloading the remainder upon request. Setting an “out of office” message will remind people that non-critical items should wait until your return.

Another good option which doesn't require any technical configuration is to use the Seed Company's web-based email interface. It is a compromise between needing moderate Internet and being able to easily manage large attachments.

https://owa.tsco.org/owa/

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3 Exceptions: The Republic of Congo and North Korea.

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When Things Don't Work

Reducing Internet During a Call
Internet voice phone calls (“Skype”) requires much better Internet than instant messaging. Internet video requires much better Internet than voice. So a quick and easy adjustment if Internet degrades during a call is to just use less of it. Move from video to audio. This will often make the audio work much better. If it is still poor quality, move from audio to text. **Text almost always works if there is any Internet at all.** Most software supports doing these changes live right in the middle of a conversation.

Fallback Plans
Have fallback plans prepared ahead of time that everyone is aware of for how to continue a meeting if technology isn't cooperating. Examples:

- Drop video and use only audio.
- Drop audio and use only text messaging.
- Switch from VSee to Skype.
- Try again in an hour.
- Try again at the same time tomorrow.
- Send an email.

Rush Hour
It turns out that Internet often has a “rush hour”. Internet providers oversell their maximum available bandwidth, just like airlines overbook flights. Also, everyone on a compound can be struggling for the same limited resources.

During off peak hours, this doesn't matter much. However, during rush hour, it can have a dramatic effect. Often when people on a compound talk about the Internet being bad or out, what is really going on is overloading of the connection.

Peak hours tend to be mid-morning and mid-afternoon until whenever people go to bed, so if the Internet is bad, try logging on late at night or early in the morning. The difference in Internet performance can be dramatic.

Don't Wake People Up
It can be difficult to schedule meetings when it is convenient for everyone. TimeAndDate.com provides a great time-of-day meeting helper that makes figuring out when to hold a call easy:

https://www.timeanddate.com/worldclock/meetingtime.html

The website also has many other travel-related features.

The Seed Company calendar is great for scheduling meetings with other Seed Company staff. NeedToMeet, http://www.needitomeet.com/, is a good solution for meetings that include partners.
Use Your Built-in Hotspot

Android phones have a built-in wireless hotspot. It can be found under “Settings|More|Tethering & portable hotspot”. This can provide better Internet when the compound's Internet is poor due to Rush Hour. It can also provide Internet when it is not easily available in other ways. (This is sometimes disabled on phones purchased from U.S. carriers.)

Buy an International Phone

In the United States, many phones are purchased directly from carriers (Verizon, AT&T, T-Mobile, Sprint). These are often locked to only work with a specific carrier. Carriers are required to unlock phones upon request once contractual obligations have been met. The carriers do not make this easy from a customer-service standpoint. These carrier-originated phones are only unlocked successfully about half the time, so test the phone with a friend's SIM before traveling.

An easy solution is to simply purchase an “unlocked” overseas telephone. Android phones available overseas often are significantly less expensive than similar models in the United States. Alternately, some unlocked phones may be purchased from sources such as NewEgg. Be sure to check the warranty to ensure that it covers US usage.

Internet Compass

The OpenSignal Android app, “3G 4G WiFi Maps & Speed Test”, provides an easy-to-use compass which points towards the nearest mobile phone tower. If your reception is spotty, simply open the app and start walking in the direction which the compass points. Your signal (& your Internet) will get better.

The OpenSignal website also provides a detailed map showing which carriers have good coverage in what physical locations. It is crowdsourced automatically by the app, so it is continually updated with impartial data. For example, looking at the map, it is easy to see which carrier has the best coverage for a particular village.

Increase Your Phone's Battery Life

A typical Android smartphone has a battery life of about a week when in Airplane mode.

The following things all have a large negative impact on battery life:

- Constantly using the screen with video, or games with lots of graphics
- Apps with too many permissions which constantly send your data across the Internet
  - (Really, does a Sudoku game need access to your contacts & Internet?)
- GPS
- 3G or LTE
  - (Edge/2G is thrifty with batteries)
- Roaming
- Wifi

To get the best battery life, uninstall unused apps and keep the phone in Airplane mode whenever not needed for calling.