

**From:** Deployment Alerts

**Sent:** Tuesday, April 25, 2017 3:24 PM

**To:** SCM-DO Distro <SCMDODistro@sprint.com>; Network Leaders - ALL <NetworkLeaders-ALL@sprint.com>; SprintAlerts@mobilitie.com

**Subject:** DO Deployment Alert: Mini Macro Trial

## *DO Deployment PMO Alert*



As you know, we initiated a trial in Feb across both the mini macro and monopole programs which concluded at the end of March. The trial granted Mobilitie permission to commence construction without necessarily securing certain build pre-requisites. Also the threshold to secure approval through CCB for 'expensive' sites was increased from \$30k/site to \$60k/site. The major objectives from this trial were to:

increase the rate of delivery of mini macros on-air, and monopoles installed beyond the existing rates experienced to date, and better understand the impacts of the existing governance and approval thresholds on deployment rates and whether they were balanced in facilitating rapid delivery whilst also protecting against program risk (e.g.; stranded assets, cost over-runs etc.)

Following the conclusion of the trial, a review of the outcomes was conducted, which are detailed below:

### **A. Mini macro on-air delivery rates**

Masa has regularly reiterated, most recently as last week, that our objective is to maximize sites 'on-air'. While the results of the trial showed an increase in the rate of sites built per week, there was no consequent increase in the weekly rate of sites being commissioned. What's more concerning is that since the trial, the weekly rate of sites being commissioned has instead declined from an average of 33/week pre-trial to 6/week during and post-trial. The root-cause of this decline has yet to be confirmed and further investigation is underway to determine the cause/s of this decline. That said, while it is premature to attribute this decline to the trial, it is appropriate to conclude that the trial did not increase the rate of sites on-air per week.

### **B. Mini macros built without permanent power**

There is sufficient evidence from the trial to conclude that commencing construction before permanent power is scheduled, increases site build rates without substantially increasing the risk of abandoned work. In addition, conducting operational testing of built sites using 'temporary power' allows us to identify hardware faults or commissioning issues which can then be rectified at the time permanent power is delivered and the site is commissioned. That said, given A. above, a consequence of allowing sites to be built prior to scheduled permanent power is an increasing stockpile of built sites which cannot then proceed into the commissioning phase creating a downstream commissioning 'bottleneck'. Claiming these sites to be 'construction complete' artificially increases claimed milestone delivery but without any downstream benefit, which creates an unrealistic expectation of rapid conversion to sites on-air, which cannot be met.

### **C. Mini macros built without full AZP**

Similarly to B. above, allowing sites to commence construction without fully completing regulatory compliance (power design, NEPA, SHPO, etc.) increases the weekly rate of sites commencing construction, however, the findings of the trial showed that 'breaking the process' to facilitate this, created downstream issues which also constricted the commissioning process resulting in fewer sites on-air (CIQ delays etc.). In addition, commencing construction prior to securing all regulatory approvals exposes both Sprint and Mobilitie to reputational risk without enjoying any tangible on-air benefit.

#### **D. Mini macrosbuilt with backhaul solution**

Throughout the duration of the trial, only a small number of sites were deployed without a known backhaul solution identified. This small incidence suggests that there is no expected substantial improvement to on-air which can be attributed to deploying sites without a known backhaul solution which balances the risk of building 'stranded sites'.

#### **E. Increasing the CCB threshold from \$30k to \$60k**

There were no cases throughout the trial period that increasing the financial threshold to \$60k resulted in any improvements in delivery outcomes.

#### **F. Deploying stacked steel monopoles**

It was confirmed through the trial that the difference in the final cost to stand-up a monopole between the stacked steel option and the fully equipped canister was negligible. Secondly, the stacked steel option avoids any potential equipment warrantee issues; and finally, the stacked steel option is consistent with the stated land-use permit application of a transport only pole, reducing any potential allegation that this proposal contravenes the approved land-use permit.

### **Conclusions**

Based on the joint experiences and learnings from the trial, it makes sense to continue with the following conclusions:

Sprint and Mobilitie continue to focus on and manage the program to achieve sites 'on-air' as opposed to 'installations complete'.

Mobilitie can continue to commence building sites prior to permanent power being scheduled, however, the milestone 'construction complete' cannot be claimed until both the site is built and permanent power is delivered to the site.

Mobilitie cannot commence building sites without full AZP

Mobilitie cannot commence building sites without a confirmed backhaul solution

The threshold of \$30k remains unchanged

Mobilitie can continue to deploy the 'stacked steel' monopole option.

Thanks,

**Chris Mills**

Vice President, Network Deployment

O: 913-315-3133 / M: 913-609-9335