***Harbinger's LTE Network – Son of Clearwire?***

Recently, with much fanfare, the FCC approved Harbinger Capital's take private transaction for its Skyterra control affiliate. Given that Harbinger has substantial Mobile Satellite Service (MSS) participation through its non controlling interests in fellow MSS operators Inmarsat (29%) and Terrestar (44%), the FCC gave close attention to the license transfer application from Harbinger with a clear intent (as seen below) of continuing to foster competition in the sector. Consequently, as part of its approval, the FCC attached conditions that compel Harbinger to, among other requirements, commit to the following:

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- Complete deployment of Skyterra's two satellite next generation Mobile Satellite Service constellation, currently under construction at Boeing Satellite Systems.
- Complete deployment of an Ancillary Terrestrial Component of the network, notionally consisting of 36,000 base stations (i.e. towers).
- Achieve coverage milestones of 100 million POPs by year end 2012, 145 million POPs by year end 2013 and 260 million by year end 2015.
- Provide mobile data (no voice) service as a wholesale provider leasing capacity to existing and new carriers.
- Obtain FCC approval prior to providing spectrum (presumably via leasing or other arrangements) to the two largest carriers (i.e. AT&T and Verizon)
- Provide no more than 25% of its traffic to these carriers.

Not surprisingly, the large carriers have protested this arrangement, and its durability remains to be seen.

For the purposes of our discussion, let's assume that these remain in place. The proposed venture certainly looks a lot like Clearwire. Consider that Clearwire operates its own 4G (in this case, WiMax technology based) network, and wholesales capacity to its strategic cable company investors and its parent Sprint. Like Clearwire, the Harbinger venture obtains a significant portion of its spectrum resources through payments to third parties – the BRS spectrum holders in the case of Clearwire (representing 59% of their total spectrum assets) and Inmarsat (representing a similar portion) in the case of Skyterra. These payments are significant – amounting

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to $260 million per year in the case of Clearwire and $115 million per year in the case of Skyterra. (Though since Harbinger is a significant owner in Inmarsat, this is sort of like taking money out of your left pocket and putting it into your right one). (For more on the Skyterra/Inmarsat deal, see our previous article from January 2008).

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There are important differences too – both in terms of spectrum assets, and in rollout stage. Looking at spectrum assets, let's compare the two. Clearwire boasts 44 billion MHz-POPs of spectrum, while the Harbinger venture is slated to go to market with 7.1 billion MHz-POPs, rising to 16.4 billion MHz-POPs assuming it gets access to Inmarsat's spectrum as planned. Clearwire's spectrum is in the 2.5 GHz band, while Harbinger's is in the 1.6 GHz band, which requires about a third fewer towers to obtain the same coverage, thus lowering Harbinger's opex and capex proportionately. For reference, Clearwire had spent about $2.5 billion on network construction through the end of 2009, and expects to spend at least another $3 billion this year, with more to come. However, Harbinger's spectrum comes with the requirement to maintain satellite coverage, at the cost of perhaps $700 million in capex (for replacement satellites) every 15 years plus perhaps an incremental $5 million in opex. Averaged out, this is about an additional $50 million per year in costs. There is also a significant regulatory burden in that terminals (i.e. handsets, at least mostly) must under current rules be satellite capable, which adds incremental cost. Someone, most likely the carrier providing service with the network, is going to have to pay – repeatedly as terminals are periodically replaced. Finally, Harbinger has the benefit of 100% coverage (at least, outdoors) that provides a differentiated offering. All in, a pretty mixed bag.

Of course, the most important difference is that Clearwire's network ***exists and is funded*** (more correctly, part of it exists, and the rest is largely financed) and Harbinger's is on paper and not financed. So, Harbinger has significant operational and financial hurdles to bridge.

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Given Clearwire's experience to date, it gives us some pause when we consider whether Harbinger is going to be able to achieve its stated goals. Consider that, to date, investors have provided Clearwire with nearly $11 billion in debt and equity that is currently valued at just under 8 billion dollars, implying that Clearwire has destroyed about $3 billion in value, not counting additional opportunity costs for the capital tied up. And this, with its network largely built out, marketing agreements in place with Sprint and it cable investors and its Clear brand launched, if not yet a household word.

To date then, Clearwire has not been a successful financial investment. This would appear to bode poorly for Harbinger's prospects to attract additional outside capital for its new venture. However, we note that this is an overly simplistic analysis. In particular, virtually all of Clearwire's major investors to date have been strategic investors looking for more than mere financial returns.

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If Harbinger can attract strategic investors of its own, then this deal gets a lot more doable. Recent accounts in the Financial Times indicate that Harbinger has been speaking to T-Mobile about being a strategic investor, and rumors are swirling about other potential investors as well. Given its spectrum issues (detailed more completely in our article from March 2010) T-Mobile is a very logical investor since the FCC clearly has heartburn associated with Verizon or AT&T getting their hands on this spectrum.

Certainly the recent addition of wireless heavyweight Sanjay Ahuja (former head of France Telecom's Orange wireless unit) helps their cause. However, given that Harbinger has committed itself to rollout milestones, it doesn't have the negotiating room that Clearwire had, and we would expect strategic investors to negotiate aggressively knowing that the clock is their ally.

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