

MWC 2018: T-Mobile USA outlines its near-term 5G strategy – more of the same

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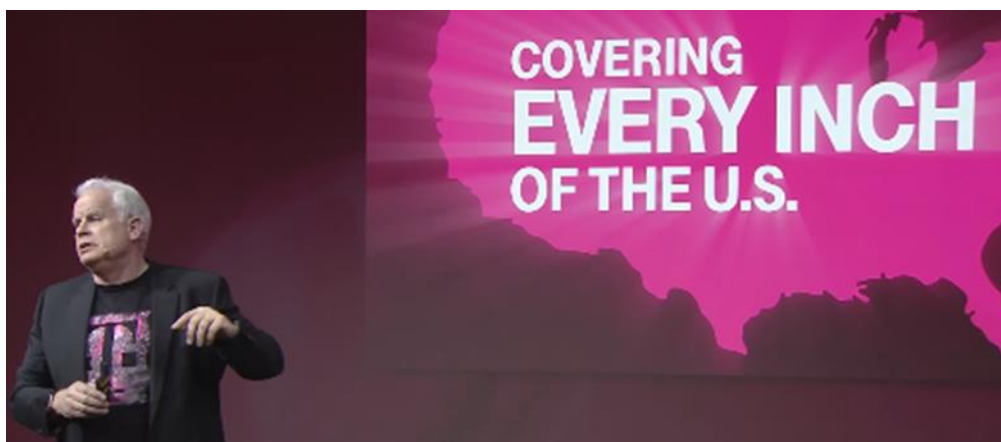
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Amid the relentless echoing noise around network-slicing and end-to-end, low-latency, industrial, B2B2X use cases for 5G at MWC 2018, we heard the radically different voice of T-Mobile USA. We often heard from established operators that the mobile consumer does not need 5G, so it was a change to hear T-Mobile USA CTO Neville Ray make quite a compelling case for 5G to be ‘more of the same’. This comment describes this approach, and assesses it in terms of it being an exemplar for a mobile-centric operator strategy, one that parent Deutsche Telekom is playing off against an FMC strategy that it has developed for consumer telecoms in most of its European footprint.

T-Mobile USA has a strong focus on maximising coverage

T-Mobile targets 100% 5G **geographical** coverage in the contiguous states by the end of 2020.

Figure 1: T-Mobile USA CTO Neville Ray presents at Mobile World Congress 2018



It is starting with 600MHz non-standalone network roll-out in 30 large cities. T-Mobile spent USD7.99 billion on an average of 31MHz of 600MHz spectrum in February 2017 (over 1.5 times its annual capex). It will also start deploying mmWave (28GHz and 39GHz) in selected dense-urban areas in 2H 2018. Ray had little to say about mmWave, other than there was still much to learn. C-band (3.4GHz-4.2GHz) has been the band most widely prepared band for 5G globally, but US operators will have less C-band spectrum to use than counterparts elsewhere because 80MHz of the initial 150MHz was set aside for shared access.¹

¹ During MWC, the US government announced plans to consider refarming more of the 3.5GHz band from military use to commercial mobile service use, so there will probably be some more, but still less than in Europe.

T-Mobile USA is focusing on consumer mobile services and devices, not on new use cases

Once Ray had presented the now obligatory slide on all the orthogonal use cases for 5G, he focused on what he says is a use case that is not talked about enough: consumers and their smartphones. He said nothing about network slicing, and little about industrial use cases, other than that 600MHz coverage will be suitable for some IoT applications, which could help T-Mobile gain some traction in the enterprise segment.

For the consumer, 5G will be an incremental step, not a transformative change. It will not be about real-life gigabit downlink speeds available only in islands of connectivity. He expects that T-Mobile 5G will deliver high tens of megabits per second, maybe even 100Mbps, real-life average downlink, but will do so on a broad geographical basis. 5G will not even be about new types of consumer devices. T-Mobile is unexcited by so-called ‘puck’ Mi-Fi devices that will work only in mmWave islands. Ray is sceptical about pre-standards mmWave FWA of the kind being rolled out by Verizon, and in any case thinks the fixed broadband market is fundamentally unexciting. So T-Mobile will not launch 5G until compatible smartphones are available, which looks like about this time next year.

T-Mobile is treating 5G as a continuation the ‘Un-Carrier’ strategy that has served them well over past 5 years (doubled subscriber base, transformed from operator with worst LTE coverage and average downlink to best). The focus has been on keeping the consumer proposition very simple, developing a higher-volume-lower-yield approach (i.e. aggressive on price) fuelled by an expansion of coverage spectrum holdings. Capital intensity looks set to remain steady at about 12% in 2018.

T-Mobile USA envisages mobile being the sole network for all consumer needs

In Europe, there appears to be renewed concern about the future viability of mobile-centric operators, reflected in four significant mobile+fixed acquisitions in the past 3 months, plus revived talks between Vodafone and Liberty Global. T-Mobile USA’s approach may be something for the dwindling band of European mobile-centric operators to learn from, applying 700MHz when they can get it rather than 600MHz. T-Mobile’s ambitions extend well beyond the traditional mobile space.

Unlimited plus, not fixed–wireless

T-Mobile Netherlands is a beachhead for T-Mobile USA thinking in Telekom’s Europe footprint, so it comes as no surprise that T-Mobile Netherlands, one of only two mobile-centric Telekom OpCos in Europe, launched a family unlimited discount plan in January 2018 (‘Alles-onder-een-dak’) very similar to the one that T-Mobile USA already has. We call this an ‘unlimited plus’ approach, and, as with FMC bundling, the basic focus is on the household not the individual.² It is tied to SIMs in mobile devices, it restricts tethering, and does not compete with fixed broadband head-on (where it might come up short anyway on service quality). Instead it aims to **nudge** customers towards giving up fixed broadband, freeing additional spend for mobile.

² See report *Conquering the Great Indoors: The Mobile-Centric Opportunity to Challenge the Quad-Play (if it’s anywhere near publication)*

Disrupt big cable

In December 2017, T-Mobile USA's CEO John Legere wrote:

"We're gonna disrupt Big Cable ... convergence between wireless and wireline will only accelerate with 5G – wired/fixed anything will go away, and soon everything will be mobile, not just wireless."

That is a massive ambition, and to be frank there is no real evidence yet of fixed going anywhere in the USA; the overall fixed broadband subscriber base continues to grow. T-Mobile's December 2017 acquisition of the small IP-based TV player Layer3 TV adds a service lustre to the ambition, but to realise it the biggest obstacle is capacity and coverage, critically indoor coverage, not service capability. The T-Mobile USA version of 5G provides just that. In fact, most MNOs (including aggressive pricers like T-Mobile USA) have swathes of largely empty networks in residential areas, and low-band 5G will simply add more.

Deutsche Telekom is doing the exact opposite in Austria

T-Mobile Austria acquired cableco UPC Austria in December 2017. This is what Srini Gopalan, Board Member for Deutsche Telekom in Europe said about the acquisition:

"With this acquisition Deutsche Telekom is taking another major step to realise our strategy to become a fully converged operator in our European footprint. The acquired cable network will be a perfect match with our best mobile network".

That is the opposite of T-Mobile USA's strategy. So which is right? Are multinational operators so pragmatic, or forced to be so pragmatic, that there are no right and wrong answers? We feel there ought to be: Austria really is not so different from USA in consumer telecoms trends, and T-Mobile is in a reasonably similar position in both. Perhaps the best way to reconcile the two is this: Telekom has an internal marketplace of ideas, where successes are mapped onto other OpCos (such as T-Mobile USA onto T-Mobile Netherlands) and unsuccessful approaches are quietly dropped.

Imperfect 5G now, not perfect 5G in the future

Integrated operators ought to be concerned about the sort of plan that T-Mobile USA has. Perhaps delays in 700MHz auctions will help them. It is often said that 5G NR is the last piece of a broader set of investments, conveniently labelled '5G', most of which is a preparatory exercise in infrastructure roll-out, virtualisation, deployment of edge cloud, a brand-new core network etc. Operators such as Telefónica see these as necessary steps to be 5G-ready when, at some point, perhaps early next decade, an interesting delta of new revenue opportunity emerges (Ericsson reckons 2021). For challenger mobile-centrics, often with little traction in B2B anyway, perhaps the best growth opportunities start much sooner than that.