DTAG – DEFINING A WINNING POSITION FOR THE US BUSINESS MODEL

Consolidated contents

17.12.2015

As per workshop discussions

T...

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DEFINING A WINNING POSITION FOR THE US BUSINESS MODEL

Context

DT has 2 large portfolio elements besides Germany and UK: TMUS and DTEU

- TMUS delivered strong performance over past 2 years\(^1\) and drives DT's growth
- EU portfolio has been struggling\(^2\) and recovery to stable business is uncertain

In consequence, TMUS gained more importance within DT (revenues and EBITDA) while the EU portfolio has lost in relevance

However, stability of TMUS business model in long-run unsure given its sub-scale position, competitive environment, and potential market changes

Objective

Create a deeper understanding of differences in US vs. DTEU portfolio market environment, structure and attractiveness

Identify major trends for the US that can disrupt current telco business models

Develop potential market “end-game” archetypes for the US

Outline options for TMUS to address key challenges in respective “end-game” archetypes (i.e., defining a winning position)

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\(^1\) +20% revenue from Q2/13 to Q2/15, +34% total customers from Q2/13 to Q2/15
\(^2\) -3% revenue from Q2/13 to Q2/15
Source: DTAG
WORKSHOP PARTICIPANTS AT A GLANCE

DTAG

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Ewan Duncan
Director

McKinsey

Source: Team analysis

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EXTENSIVE EXPERT INTERVIEWS CONDUCTED TO UNDERSTAND MARKET DYNAMICS

Endre Holen
Macro trend perspective on US market

Satya Rao
Adjacencies and future business models

Brendan Gaffey
Macro trend perspective on US market

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Adjacencies and future business models

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Ewan Duncan
Macro trend perspective on US market

Martin Wrilich
Spectrum scarcity, fixed to mobile trend

Tomas Calleja Mediano
Macro trend perspective on EU

Lars Engel Nielsen
Macro trend perspective for EU, FMC deep dive

Markus Meukel
Expert for eSIM and future business models

Source: Team analysis

LIFE IS FOR SHARING.
TODAY, THE US TELCO MARKET IS MORE ATTRACTIVE THAN EUROPEAN PORTFOLIO MARKETS

1. More favorable macroeconomic environment
   - ~42 TEUR GDP/capita 2015, growing 3% p.a. 2012-20
   - 323mn population 2015, growing 1% p.a. 2012-20
   - 82% urban population 2015

2. Larger market with more attractive growth prospects
   - ~397bn USD telco service revenues\(^1\) in 2015 that are stagnating (i.e., ~zero growth till 2020)
   - ~197bn USD video revenues\(^2\) in 2015, with 3.1% growth p.a. till 2012-2020
   - 3.3% telco and video spend as percentage of GDP\(^3\) 2015, declining -3% p.a. 2012-20

3. Market with limited competition and different structure
   - Limited fixed broadband overbuild
   - No nationwide fixed broadband players
   - Small role of MVNOs

4. More friendly regulatory environment fostering investments\(^4\)
   - Regulator with infrastructure focus
   - Reliable and investment friendly spectrum awards
   - Stable political environment

5. Customers show higher spend for telco services
   - 36 EUR mobile market ARPU\(^5\) Q2 2015
   - 71 EUR fixed market ARPU\(^5\) Q2 2015

VS.

DTEU Portfolio (excl. Germany and UK)

- ~17 TEUR GDP/capita 2015, growing 3% p.a. 2012-20
- 127mn population 2015, growing 0% p.a. 2012-20
- 67% urban population 2015

- ~37bn EUR telco service revenues\(^1\) 2015, declining -3% p.a. 2012-20
- ~9,3bn USD video revenues\(^2\) in 2015, with 3.0% growth p.a. till 2012-2020
- 2.1% telco and video spend as percentage of GDP\(^3\) 2015, declining -5% p.a. 2012-20

- Fixed broadband overbuild more common
- Typically strong nationwide incumbents
- Significant MVNO market shares in Western Europe

- Regulator with competition and consumer welfare focus
- Unreliable and CAPEX harming spectrum awards
- Political uncertainty in certain CEE markets

- 13 EUR weighted mobile market ARPU\(^5\) Q2 2015
- 31 EUR weighted fixed market ARPU\(^5\) Q2 2015

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1 Fixed and mobile service revenues
2 Video (incl. HR, SK, MK, ME, AL) for DTEU includes PayTV, physical home video, CITT and TV advertising
3 Revenues (video, wireline, mobile)/GDP
4 Impact of Net Neutrality policies on investment friendliness yet to be seen
5 Compared to currently ~17k USD net adjusted disposable household income for selected DTEU portfolio countries (average for HU, CZ, SK) vs. ~41k USD in US households
Source: Team Analysis, Analysts Mason, GMI, OECD

Details in appendix
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Case: 1:19-cv-05435-VM

DT-LIT-00018092 Page 16
NEW MOBILE ENTRANTS WILL NOT BECOME RELEVANT PLAYERS

Trend factuals – excerpt

MVNO subscriber market share%

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<tr>
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<th>TRACFONE</th>
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</table>

MVNOs currently with 9% market share in the US telco market (vs. 15%+ in selected Western European countries)

US MVNO agreements based on commercial terms – all 4 mobile players will continue to engage in commercially rational contracts

Regulation won’t support access seeker business models as the FCC values infrastructure investments over competition.

– Expert interview

High degree of speculation in press regarding cable MVNOs – but they will generally not be a force

– Expert interview

European regulation likely to continue favorable regulation for access seeker business models

– Expert interview

Telco is a nationwide scale game. Without regulatory and telco support it is almost impossible that new mobile entrants will be able to disrupt the industry.

– Expert interview

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“So What” for TMUS

Trend can be disregarded to define a winning position for TMUS

• Continuation of status quo bears no disruption potential for TMUS

• Emergence of MVNO entrants unlikely – however, if they would emerge it bears a disruption potential for TMUS

Disruption Impact for TMUS

Low

High

Low

High

Likelihood

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Page 24
US ARPUs will remain on much higher level than in EU portfolio countries

Trend factuals – excerpt

US Mobile service ARPU, USD/month

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<tr>
<th>Year</th>
<th>48</th>
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4% p.a.

DTEU portfolio mobile service ARPU, EUR/month

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<th>Year</th>
<th>17</th>
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2% p.a.

Future mobile ARPU expected to stabilize at lower levels in DTEU portfolio countries

“So What” for TMUS

1. Expert opinion that US consumers care more about bundles and features vs. low price offers. 2. Weighted average based on the service revenues per country.

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MOBILE/MOBILE AND FMC CONSOLIDATION COULD CHANGE TELCO MARKET STRUCTURE

Trend factuals - excerpt

**Mobile**
- TMUS + Sprint merger regarded as natural strategic move by all experts
- However, regulator unlikely to allow emergence of 3-player mobile market
  - Antitrust policy changing slowly as no direct political influence possible, any changes only likely in mid/long-term via changes in key personnel
  - Lobbying / media campaigns could help to influence decision
- Consolidation also unlikely under new Democratic administration and only slight improvements vs. today expected under Republican government
- Dish’s massive spectrum could lead to mid-term spectrum deal

**Fixed**
- Cable players under limited consolidation pressure, since they are winning broadband market share from traditional telcos
- No FMC consolidation focus due to limited geographic footprint of individual cable players (no county wide FMC possible) and given prohibition of previous cable mergers
- Many experts eventually expect a Verizon Comcast merger
- However, “ego issue” of several large market players hinders consolidation (e.g. VZ, Comcast do not want to give up control, Cox Comm. “not for sale”)

**Video/content**
- Further consolidation of video services seen as likely (e.g. content player + telco), long term success of integrated business models needs to be proven
- Telcos will not end up as content owners and aggregation role difficult due to very fragmented content distribution rights

“So What” for TMUS

Trend is a relevant wild card – with clear disruption potential for TMUS
- Sprint merger as natural strategic step to obtain nationwide scale – however, regulatory approval on short-term regarded as unlikely
- Further FMC consolidation might reduce addressable market share for TMUS as mobile only player (if AT&T launches FMC offer and Verizon attempts to merge with Comcast)

Source: Team analysis, reports, expert interviews

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FURTHER LONG-TAIL CONSOLIDATION TO BE EXPECTED IN THE FIXED NET MARKET

Trend factuals - excerpt

Manifold recent consolidation (attempts) among large cablecos

- Comcast
  - Merger between Comcast (#1) and TWC (#2) prohibited

- Charter
  - Charter Comm. (#3) bought TWC (#2) and Bright House (#6)

- Altice
  - Altice bought CableVision (#5) and Suddenlink (#9)

Continued long-tail consolidation to be expected

- Currently still over 400 cable providers in the US (i.e., highly fragmented market)
- Many cable providers are nationwide subscale: 93% of the cable providers operate in one state only and only 20 providers cover more than >1 mn people

"So What" for TMUS

Trend can be disregarded to define a winning position for TMUS

- Continuation of status quo outside of Mobile market bears no disruption potential for TMUS

Everything below Comcast is in consolidation mode

- D. Goei, (CEO, Altice)

- Strictly Confidential - 35
REGULATORY ENVIRONMENT REMAINS STABLE IN US AND EUROPE

Trend expectations - excerpt

<table>
<thead>
<tr>
<th>Wholesale</th>
<th>US</th>
<th>DTEU</th>
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</thead>
<tbody>
<tr>
<td>Still no mobile wholesale obligation, thus no new disruptive market entries (MVNOs)</td>
<td>MVNO obligations will likely remain</td>
<td></td>
</tr>
<tr>
<td>No fixed wholesale regulation expected, thus no new market entries by access seekers (e.g., ULL)</td>
<td>Fixed access regulation might become more lax but significant improvements yet to be seen</td>
<td></td>
</tr>
<tr>
<td>Consolida-</td>
<td>4-&gt;3 merger not expected in the short term</td>
<td>4 player mobile markets will remain key objective of EU competition policy</td>
</tr>
<tr>
<td>dation</td>
<td>Major cable consolidation rather unlikely given TWC-Comcast prohibition</td>
<td>No change regarding approach towards FMC consolidation</td>
</tr>
<tr>
<td>Cross-sector consolidation will likely get approval</td>
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</tbody>
</table>

See trend 10 for further details

Source: Trend Analysis; 1: currently difficult to assess how far investment environment can be improved.

“So What” for TMUS

Stable trend, thus no disruption expected for TMUS - can be disregarded for archetype building

- Continuation of status quo bears no disruption potential for TMUS
- Monitoring of situation and active lobbying for mobile-mobile consolidation

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WRAP UP - US CONTINUES TO BE AN ATTRACTIVE MARKET DESPITE POTENTIAL WILD CARD TRENDS

1. US continues to have more favorable macroeconomic environment vs. DTEU portfolio countries

2. US continues to be the larger market with relatively more attractive growth vs. DTEU portfolio countries

3. US continues to have less competitive market structure (e.g., no access seeker business model) vs. DTEU portfolio countries

4. US continues to have more operator friendly regulatory environment (i.e., to foster infrastructure invests) vs. DTEU portfolio countries

5. US customers will continue to have higher spend for telco services (e.g., US mobile ARPU will remain ~ 22 EUR higher than in DTEU portfolio countries)

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1 Impact of net neutrality policies on investment friendliness yet to be seen. EU might slightly improve. Source: D'TAG. Team Analysis

- Strictly Confidential -
CONTENTS

Workshop I

Workshop II

- Workshop I recap
  - Future competitive dynamics
  - So what for TMUS to define a winning position
  - Wrap up and next steps
US MARKET IS AND WILL CONTINUE TO BE MORE ATTRACTIVE THAN DTEU PORTFOLIO MARKETS

US market structure is and will remain lower than in EU
- No nationwide fixed net players
- Less consumer choice for fixed BB/TV

Competition is
- US regulation more investment friendly – EU might slightly improve
- But, there won’t be a full "reversion to the mean"
- In US, large domestic players key beneficiaries

No major shifts in regulatory policy expected
- Though no increase expected
- ... and also CAPEX levels significantly higher

US ARPs will remain significantly higher than in EU

Even disruptive market trends will not change the picture

Details in appendix

1 EU refers to DTEU portfolio countries
2 Impact of Net Neutrality policies on investment friendliness yet to be seen

Source: DTAG, Team Analysis

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CONTENTS

Workshop I

Workshop II
- Workshop I recap
- Future competitive dynamics
- So what for TMUS to define a winning position
- Wrap up and next steps

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Phase I – Continue organic growth

- Will we achieve our planning?
- How long can we grow organically?
- Will competition put TMUS under pressure?
- How to become most attractive 2018+ merger target/partner?
- How to ensure that TMUS executes portfolio options before growth stops?

Phase II – Participate in market consolidation

- 4>3 merger Sprint %
  Preferred – get Sprint to obtain necessary scale

- (Subsequent) cable merger %
  Preferred – ideally after Sprint merger, else stand-alone

- Alternate mergers
  Stand-alone exit option – if none of above feasible

- Organic #3 in mobile T-Mobile
  Last resort (might be unavoidable?!?) – if none of above feasible (sustainability questionable)

Define strategy towards Dish –
Watch out for competitors' interest in Dish

1 Under derived assumption that competitive dynamics will keep the market structure fairly stable
Source: Team Analysis

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# PHASE II: SPRINT AND COMCAST MOST LIKELY MERGER PARTNERS – BUT THERE MIGHT ALSO BE NO ONE?

## FOR DISCUSSION

<table>
<thead>
<tr>
<th>Potential TMUS end-games</th>
<th>Key strategic rationale(s)</th>
<th>Strategic or regulatory barrier(s)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>1</strong> 4-3 mobile merger</td>
<td>Sprint on verge of bankruptcy (would love to merge)</td>
<td>Likelihood of approval will not increase substantially in case of bankruptcy (Analysts: even with Republican administration only &lt;50% probability)</td>
</tr>
<tr>
<td><strong>2</strong> (Subsequent) cable merger</td>
<td>Clear scale gain and synergy potential for TMUS to own ~30% of mobile market (at scale with AT&amp;T, VZ)</td>
<td>Potential burdensome CFIUS process?</td>
</tr>
<tr>
<td><strong>3</strong> Alternate mergers</td>
<td>Move into mobile might be only natural option for Comcast to grow, as preferred Comcast moves (i.e., wireless and content) are unlikely to get regulatory approval</td>
<td>Likely no significant regulatory barriers²</td>
</tr>
<tr>
<td></td>
<td>Bring video content onto mobile (i.e., linear/GTT)</td>
<td>If move into content gets regulatory approval, it will be more likely than move into mobile (see appendix)</td>
</tr>
<tr>
<td></td>
<td>Potential move into mobile as adjacency play (e.g., eyeball increase, mobile video, cost synergies)</td>
<td>No nationwide fixed net – limited FMC potential</td>
</tr>
<tr>
<td><strong>4</strong> Organic #3 in mobile</td>
<td>Creation of one North American service market and synergy potentials with existing verticals</td>
<td>Less likely than Comcast due to lower TMUS footprint overbuild (FMC ability) and weaker financials</td>
</tr>
<tr>
<td></td>
<td>Return to execution of core business model vs. current MVNO play (TracFone)</td>
<td>Likely no regulatory barriers</td>
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<td>Move into mobile could be an opportunistic adjacency play for Altice</td>
<td>Potentially cheaper and better acquisition candidates around the globe</td>
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<tr>
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<td>No merger optionality can be exercised (due to barriers)</td>
<td>Altice currently small cable player in US (&lt;4mn TV and broadband subs)</td>
</tr>
</tbody>
</table>

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¹ Lobbying campaign needed
² Unless Comcast becomes WiFi/MVNO entrant; FCC likely to raise concerns regarding vertical integration (i.e., mobile video) - moreover, FMC M&A untested in US

Source: Team Analysis, Expert Interviews

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P_Ex_339

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PHASE I: TMUS PLAYBOOK TILL 2018

Action path till eoy 2017

- **Continue Uncarrier growth** in B2C according to plan\(^1\) or above
- **Explore further growth adjacencies** (e.g., B2B, IoT, M2M, mobile video)
- **Bid in next incentive auction**
- **Define strategy towards Dish** spectrum (i.e., what is the right acquisition price?) – Hypothesis: Dish currently a distraction – wait until their negotiation power is weakened
- **Continue network densification as needed**
- **Continue value strategy** to keep 4>3 merger optionality
- **Strengthen lobbying** for 4>3 merger (i.e., win "right" people in D.C., media campaign)
- **Don't overplay offending consolidation stakeholders** (FCC, DOJ, AT&T, VZ, merger partners and Unions will be important in future deal-making)

- **Show openness to consolidate**
  - Signal TMUS interest in Sprint and position Sprint as difficult asset for cablecos\(^2\)
  - Signal TMUS interest in (subsequent\(^3\)) cable merger and advertise superiority over VZ
- **Invest in assets and activities that complement a cableco merger** (i.e., large and valuable customer base, network strength, ad and mobile video capabilities)
- **Consider MVNO cableco deal** to establish long-term partnerships?

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\(^1\) Customer, revenue, EBITDA, FCF and EV growth
\(^2\) Especially for Comcast, Charter Group and Altice
\(^3\) xfer TMUS = Sprint merger if feasible

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US IS A MARKET WITH FEWER COMPETITION
VS. DTEU AND DIFFERENT MARKET STRUCTURE

US
- Area with at least 2 broadband providers
- Area with 1 or no broadband provider

DTEU portfolio

Fixed
- No nationwide broadband players – high geographical fragmentation
- Limited FMC ability
- Limited overbuild for broadband
- Cable key broadband technology

Mobile
- 2 main players (i.e., from 4 nationwide operators 2 are nationwide subscale)
- MVNOs not significant in terms of market share

- Strong nationwide incumbent(s) typical
- FMC as typical value proposition
- Broadband overbuilt more common
- No dominating technology for broadband

Incident and at least 2 further operators common
- MVNOs with significant market shares in Western Europe

1 According to the National Broadband Map defined as a two-way data transmission with advertised speeds of at least 768 kilobits per second (kbps) downstream and at least 200 kbps upstream.
Source: DTAG Team Analysis. Broadband.gov
US MARKET WITH MORE FRIENDLY REGULATORY AND POLITICAL ENVIRONMENT (1/2)

US

US regulation aims at fostering investment.

Additional focus on consumer welfare and competition also observable.

Overall policy objectives

Access seeker Business

No regulated wholesale access
- No obligation to offer fixed wholesale access
- No obligation to offer MVNO access – MVNOs or commercial terms only

Spectrum awards

Reliable and investment friendly spectrum awards
- Transparent and reliable auction designs
- Spectrum ownership enables long-term investment perspective
- Spectrum awarded regionally
- Better secondary market for spectrum
- Significant spectrum allocation for mobile (e.g., 600MHz auction in 2016)

DTEU

EU regulation aims at enhancing competition and securing consumer welfare

Kroes announcement of 2012, recommendation on costing methodologies and non-discrimination, and comments by Oettinger show willingness to improve investment climate

Strict regulated wholesale access obligations enable and protect access seeker business models (e.g., ULL based like 1&1, MVNO like Drillisch, etc.)

Unreliable and investment harming spectrum awards
- Intransparent and non-harmonized auction designs maximizing state proceeds
- No spectrum ownership - limited license durations create investment uncertainties and "extortion potential" in future auctions

1 US Telco industry complaints about fines above 100mUSD
Source: DTAG, Team Analysis

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4 US MARKET WITH MORE FRIENDLY
REGULATORY AND POLITICAL ENVIRONMENT (2/2)

US

Lax consumer protection, net neutrality allows zero-rating
- Very relaxed consumer protection and data privacy policy
- Net Neutrality covers fixed and mobile operators (excl. B2B)
  - Allows for zero-rating
  - "Specialized services" possible and could be prioritized
- Policy driven by case law ("wait-and-see intervention")

Large scale in-market consolidation currently not allowed
- Little support for 4>3 mobile consolidation
- Large scale cable consolidation was put on hold
- FMC/Video consolidation likely to receive clearance
- MVNO competition not considered (e.g. TracFone)

Overall rather stable political environment
- No sudden regulatory measures for political purposes or to close budget gaps (exception: FCC's net neutrality decision)
- Changes in political powers do not lead to major alterations
- Enables long-term investment perspectives

DTEU

Strict consumer protection, net neutrality allows zero-rating
- Very strict consumer protection and data privacy policy
- Net Neutrality requirements for all operators (mobile, fixed)
  - Allows for zero-rating
  - Specialized services" possible and could be prioritized
- Policy driven by coordinat. approach amongst regulators

Significant further in-market consolidation questionable
- 4>3 mobile consolidation becoming more difficult, unless structural remedies can be offered
- FMC consolidation so far approved with no (GTS) / light remedies (Belgium)
- Commission with intense focus on keeping up competition

High political uncertainty in some CEE
- Special taxes, excessive fees etc. (e.g. HU, ROM)
- Nationalistic attitudes and critical towards foreign ownership
- Investment environment largely dependent on political parties in power
- Compliance issues in several CEE countries

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1 Zero-rating as long as non-discrimination of other similar services, e.g. video; however no throttling or prioritization of services allowed, e.g. video vs. rest of traffic
2 Special services are considered as not being regular Internet traffic (such as high-quality VoIP, IPTV) and can be treated differently; definition of "specialized services" not yet finalized in both regions

Source: DTAG, Team Analysis

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4. REGULATORY INCENTIVES FORCED A BETTER INFRASTRUCTURE IN US THAN IN DTEU COUNTRIES

<table>
<thead>
<tr>
<th>Cable HH coverage, %</th>
<th>4G population coverage, %</th>
<th>Fiber share HH %</th>
</tr>
</thead>
<tbody>
<tr>
<td>89</td>
<td>98</td>
<td>7</td>
</tr>
<tr>
<td>100%</td>
<td>79</td>
<td>9</td>
</tr>
<tr>
<td>53</td>
<td>79</td>
<td>2</td>
</tr>
</tbody>
</table>

1. 2014 share of broadband subs with FTTB/H technology as a total number of broadband subs
2. Household population based weighted average for DT Europe footprint countries without Albania, Macedonia, and Montenegro
Source: Digital Agenda - European Union, broadbandmap.gov, press, AT&T, TeleGeography, team analysis

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US CUSTOMERS SHOW HIGHER SPEND FOR TELCO SERVICES

Market ARPU 2014
USD/month:

US 226* 85
NL 111 94 23
AU 95 59 49
GR 83 31 24
HR 69 33 16
CZ 62 38 16
SK 60 32 16
PL 52 26 17
HU 51 23 17
RO 31 8 16

- US mobile ARPU on average around 3x higher than in DTEU footprint countries
- US fixed ARPU on average more than 2.5x higher than in DTEU footprint countries
- US Pay-TV ARPU on average more than 4x higher than in DTEU footprint countries

* Includes subscription and on-demand revenue via cable, satellite, IPTV and DTT (excl. TV advertising)

Source: DTAG, Team Analysis

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APPENDIX

Workshop I

- Current DTAG position in US vs. European portfolio countries
- Today’s market attractiveness of US vs. European portfolio countries
- Key trends shaping the future of the US telco market

Workshop II

- Workshop I recap
- Future competitive dynamics

- So what for TMUS to define a winning position
1. **TMUS + SPRINT MERGER AS PREFERRED MOVE, BUT REGULATORY APPROVAL IS DIFFICULT**

**KEY PARAMETERS AT A GLANCE**

**a. Strategic rationale?**
- Sprint on verge of bankruptcy (would love to merge)
- Clear scale gain and synergy potential for TMUS to own ~30% of mobile market (at scale with AT&T, VZ)

**b. Combined network effects?**
- 188 MHz additional spectrum – 14 MHz in the most attractive low band segment
- Complimentary coverage in select US regions

**c. Regulatory barriers?**
- Regulator will unlikely approve 4>3 mobile merger (even with Republican administration)
- Even in case of bankruptcy regulatory approval might be unlikely (Analysts: also under Republican administration potentially only <50% probability for that)

**d. Key Do's and Don'ts to realize TMUS + Sprint merger**
- Strengthen lobbying activities for 4>3 merger with the “right” people in Washington
- Position Sprint as difficult merger asset towards AT&T, VZ, and cablecos
- Continue value strategy (to keep optionality for 4>3 merger)
- Do not overplay offending consolidation stakeholders\(^1\)
- Do not follow Sprint in price wars or irrational MVNO deals (sustain ARPUs)

**e. Sprint is a target to many**
- at&t, Charter, T-Mobile, VT, Verizon, Comcast

**f. Deal likelihood**
- **PRO:** Market structure calls for consolidation, 4>3 in the interest of all mobile players
- **CON:** Regulatory approval for 4>3 merger difficult

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\(^1\) FCC, DOJ, Unions, AT&T, VZ
Source: Team Analysis, Analyst reports, Capital IQ

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**So What** for TMUS

**Preferred merger** – ideally prior to subsequent cable merger

**Continue value strategy** to keep optionality for 4>3 merger

**Avoid that anyone else gets them** (signal Sprint as difficult target to cablecos)

**Strengthen lobbying activities for 4>3 merger with the “right” people in Washington**

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REGULATORY APPROVAL AS KEY BARRIER FOR TMUS + SPRINT MERGER

Near term regulatory approval for 4>3 mobile merger seems highly unlikely ....

It's going to be hard for someone to make a persuasive case that reducing 4 firms to 3 is actually going to improve competition for the benefit of American consumers.

- William Baer, DOJ

We must protect competition where it exists. Our goal should be to ask how competition can best serve the public.

- Tom Wheeler, FCC

Were [the deal] somehow approved, there would be numerous conditions attached, such as the divestiture of spectrum/other assets and imposition of a wholesale mandate that would bleed off a portion of the financial benefits.

- UBS

... however, various levers for TMUS to lobby for 4>3 mobile-merger exist

- Strengthen lobbying activities for 4>3 merger with the “right” people in Washington

- Don’t overplay offending consolidation stakeholders (FCC, DOJ, AT&T, VZ, merger partners and Unions will be important in future deal-making)

- Strong commitment to provide mandatory wholesale at competitive rates could help – additional structural remedies likely to be required

Risk: Bears the danger to reduce ARPU’s and make TMUS less attractive for further merger optionalities

Source: Press Analysis, DTAG, Team analysis

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Even in case of Sprint Bankruptcy - FCC may not allow for 4>3 merger

Current Sprint situation at a glance

Financial distress
- Low EBIT margins (~6% in 2014, ~2% in 2015)
- ~4.5bn USD cash burn rate expected for 2015
- Debt of 2.5bn matures in 12/2016 (currently no Source for refinancing)

Turnaround initiative started
- 2.5bn USD cost-cutting program started in Q2/2015
- Aggressive pricing (i.e., unlimited plan for 60 vs. 80 USD for TMUS)

Outlook for the next ~12 months

Continued support from Softbank expected
- ...to see whether turnaround initiative shows measurable success
- ...to wait for presidential elections (even though 4>3 approval remains unlikely under Republican administration, it is worthwhile a wait)

2 potential outcomes by eoy 2016

Outcome 1 - Sprint turnaround fails and bankruptcy is unavoidable
- Likelihood of approval will not increase substantially in case of bankruptcy\(^1\) (Analysts: even with Republican administration only <50% probability)
- If allowed – mobile players most likely purchasers (as operational synergies are larger for MNOs vs. cablecos)

Outcome 2 - Turnaround shows success and Softbank continues financing

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1 The failing firm definition is rarely invoked in court or before agencies. When it is, it is perceived as rarely successful. Source: Analyst reports, Team analysis.

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PREPARE FOR COMCAST BUYING TMUS AS 2018+ OPTIONALITY

KEY PARAMETERS AT A GLANCE

a) Strategic rationale for Comcast?
   - Move into mobile might be only natural option to grow as preferred moves (i.e., wireline and content) are unlikely to get regulatory approval
   - Several strategic advantages
     - Increase eyeballs
     - Bring video content onto mobile (i.e., linear/OTT)
     - FMC ability in select areas (but w/o massive discounts; i.e., broadband & mobile bundle for cord cutters)
     - Realize cost and network synergies through economies of scale
     - Fits with Wi-Fi first approach

b) Combined network effects?
   - ~90mn people with Comcast access in the states where TMUS has >70% coverage
   - ~59mn TMUS customers vs. ~22mn Comcast TV & ~23mn Broadband subscribers

c) Regulatory barriers?
   - Likely no significant regulatory barriers

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Key Do's and Don'ts to dress TMUS for optionality?

- Bid for spectrum & continue densification
- Increase customer base (i.e., especially younger, video affine demographics)
- Signal Sprint as difficult asset for Comcast and signal interest to merge with Comcast subsequent to potential TMUS + Sprint merger
- Don't enter into fixed (i.e., wholesale, FMS) without thinking through what it means for Comcast merger

Alternates for Comcast?

- Sprint (If still existent and stabilized
  Pending FCC approval (i.e., largest fixed/mobile player, vertical integration)

Deal likelihood?

- PRO: Strategic rationale (see section a)
- CON: No wireless experience, only small growth in wireless, limited FMC ability, likely to explore alternate adjacencies if at all feasible (i.e., wireline and content)

"So What" for TMUS

Preferred merger - ideally after Sprint merger, else stand-alone
Be attractive bride by investing in network strength and growth of subscriber base
Avoid Comcast + Sprint or VZ merger (signal Sprint as difficult target)
Signal merger interest with Comcast (i.e., à la "you can get a merged TMUS + Sprint")
PREPARE FOR CHARTER GROUP MERGER AS 2018+ OPTIONALITY

KEY PARAMETERS AT A GLANCE

a. Strategic rationale for Charter Group?
   - Potential move into mobile as adjacency play
   - Several strategic advantages
     - Increase eyeballs
     - Bring video content onto mobile (i.e., linear/OTT)
     - FMC ability in select areas (but w/o massive discounts; i.e., broadband & mobile bundle for cord cutters)
     - Realize cost and network synergies through economies of scale
     - Fits with Wi-Fi first approach

d. Key Do's and Don'ts to dress TMUS for optionality
   - Increase customer base (i.e., especially younger, video affable demographics)
   - Bid for spectrum & continue densification
   - Signal Sprint as difficult asset for Charter Group and show interest in (subsequent) Charter deal
   - Don’t enter into fixed (i.e., wholesale, FMS) without thinking through what it means for Charter merger

b. Combined network effects?
   - ~60mn people with Charter Group access in the states where TMUS has a >70% coverage
   - ~58mn TMUS customers vs. ~17mn Charter Group TV & ~20mn Broadband subscribers

c. Regulatory barriers?
   - Likely no significant regulatory barriers

3. Alternate brides for Charter group?
   - Sprint
     - If still existent and significantly stabilized
     - Pending FCC approval (i.e., largest fixed/mobile player, vertical integration)
   - Verizon

f. Deal likelihood?
   - PRO: Strategic rationale (see section a)
   - CON: Occupied with post-merger efforts for next 1-3 years, financially torn, higher synergies with fixed players (i.e., CenturyLink, Frontier), no wireless experience, limited FMC ability

"So What" for TMUS

Preferred merger - if possible after Sprint merger, else stand-alone
Be attractive bride by investing in network strength and growth of subscriber base
Avoid Charter + Sprint or VZ merger (signal Sprint as difficult target)
Signal merger interest with Charter (i.e., "you can get a merged TMUS + Sprint")

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1 Percent of the population with T-Mobile wireless access in that geography
2 FCC likely to raise concerns if Charter Group becomes WiFi/MNG entrant and regarding vertical integration (i.e., mobile video)

Source: Team Analysis, Analyst reports, Capital IQ, Broadbandnow.com, Broadbandmap.gov
## 2D Strong Network Together with Sub + FCF Growth Key to Dress for Cablecos

### Do's
- **Invest in a strong network** (i.e., acquire spectrum, increase densification, engage in WiFi offloading)
- **Increase customer base** – focus especially on the younger, video affine demographics that consume significant amounts of mobile video
- **Further strengthen P&L and balance sheet** – to allow TMUS enter into merger negotiations from a position of strength
- **Consider creation of mobile-only video content** (i.e. short form) that could be integrated in cablecos OTT offering
- **Safeguard and further expand “sexy and innovative” T-Mobile image**
- **Try to establish/acquire attractive mobile ad-technology that is feasible for both mobile and cable players**

### Don'ts
- **Don't decrease prices and ARPU levels too much for the sake of customer growth / as reaction to Sprint**
- **Don't experiment with offers that could increase churn of existing customer base**
- **Don't duplicate “innovative capabilities” that are already present at cablecos but lacking at TMUS**
- **Don’t enter the wireline domain**, i.e., own build-out, commercial whole-buy, FMS – might make cable moves more difficult and a financial benefit unlikely

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1 Without having a long-term strategy that includes a consolidation plan
Source: Team Analysis, Expert interviews

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P_Ex_339  
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3 PREPARE FOR AMERICA MOVIL MERGER AS 2018+ OPTIONALITY

KEY PARAMETERS AT A GLANCE

a) Strategic rationale for America Movil?
   - Become full-fledged US MNO (execution of AM's core business model)
   - Several strategic advantages
     - Increased eyeballs (>83mn mobile subs)
     - Creation of one North American mobile service market (US, Mexico)
     - Realization of cost synergies through economies of scale and MVNO -> MNO transition

b) Combined network effects?
   - 25.7mn mobile subscribers in US via MVNO TracFone
   - Merged company could have >100mn mobile subscribers by 2019

b) Regulatory barriers?
   - No regulatory barriers expected (i.e., merged company would be smaller than AT&T or VZ)

Key Do's and Don'ts to dress TMUS for optionality?
- Increase customer base
- Bid for spectrum & continue densification
- Signal Sprint as difficult asset for AM
- Signal merger interest to AM
- Ensure that any potential MVNO deal is long-term beneficial to TMUS
- Don't engage in price war (sustain ARPU)

Alternate brides for AM?

Sprint
   - If still existant and significantly stabilized

Deal likelihood?
- PRO: Strategic rationale (see section a)
- CON: Potentially better investment opportunities in other core markets (i.e., LATAM)

"So What" for TMUS

Potential stand-alone exit option – if Comcast merger not feasible
Avoid AM + Sprint merger (signal Sprint as difficult target)
Signal merger interest with AM (ideally subsequent to Sprint merger)
Be an attractive bride (enhance network and grow subs)

1 TMUS subscriber base forecasted to be ~78mn by 2019
Source: Team Analysts, Analyst reports, Capital IQ, Broadbandnow.com
3 PREPARE FOR ALTICE MERGER AS 2018+
OPTIONALITY
KEY PARAMETERS AT A GLANCE

- Strategic rationale for Altice?
  - Move into mobile could be an opportunistic
    adjacency play for Altice (much like
    a PE player)

- Combined network effects?
  - ~16.9mn people with Altice access in the
    states where TMUS has a >70% coverage
  - ~59mn TMUS customers vs. ~3.5mn
    Altice TV (of which about 2.5mn in NY) and
    ~4mn broadband subscribers

- Regulatory barrier?
  - No regulatory barriers expected (i.e., due
    to wireline vs. wireless presence)

- Key Do's and Don'ts to dress
  TMUS for optionality
  - Bid for spectrum & continue densification
  - Increase customer base
  - Signal Sprint turnaround as too challenging for
    Altice (given no wireless experience nor
    relevant synergies)
  - Ensure that any potential MVNO deal is long-
    term beneficial to TMUS
  - Don't engage in price war (sustain ARPs)

- Potential alternate Altice targets
  - Sprint
  - If still existent and stabilized

- Deal likelihood?
  - UNLIKELY: Higher synergies with fixed players
    (i.e., Centurylink, Frontier), Sprint much better fit for
    their lean turnaround playbook

---

1 Percent of the population with T-Mobile wireless access in that geography
Source: Team Analysis, Analyst reports, Capital IQ, Broadbandnow.com

FOR DISCUSSION

"So What" for TMUS
Be attractive bride by
investing in network
strength and growth of
subscriber base
Avoid Altice + Sprint
merger (signal Sprint
as too challenging to
turn around)
TMUS EXPECTED TO GROW ORGANICALLY TO ~76MN CUSTOMERS BY 2019

Customer development 2012-19\(^1\) of 4 major mobile players

\[
\begin{array}{c|c}
\text{Mn} & \text{CAGR} \\
\hline
\text{at&t} & 3 \% \\
\text{verizon} & 3 \% \\
\text{T-MOBILE} & 5 \% \\
\text{Sprint} & 0 \%
\end{array}
\]

\(iPF\) predicts ~76mn TMUS customers by 2019 (4.9\% 2015-19 growth p.a., adding ~4.1mn customers annually)

TMUS expected to be a strong 3\(^{rd}\) player by 2019

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\(^1\) TMUS based on iPF 16-19, AT&T and VZ based on overall market growth except for TMUS, Sprint assumed to be flat

Source: iPF, Team Analysis

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5 DON’TS TO MAINTAIN 2018+ MERGER OPTIONS

- Don’t enter into MVNO deal that could complicate consolidation
  (Deals should increase TMUS value)

- Don’t trigger a price war in the US market
  (Stable ARPPUs base drives attractiveness & valuation)

- Don’t overplay offending consolidation stakeholders
  (FCC, DOJ, AT&T, VZ, merger partners and Unions will be
  important in future deal-making)

- Don’t invest in asset heavy media, i.e., content rights or production
  (Lack of scale for TMUS and unlikely return on capital)

- Don’t enter the wireline domain¹, i.e., own build-out, whole-buy, FMS
  (Might make cable moves more difficult + financial benefit unlikely)

¹ Without having a long-term strategy that includes a consolidation plan
Source: Team Analysis

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