

# Red Compartida

The Largest Telecommunications Project in  
the History of Mexico

# Investment Analysis and Opportunity Framework

- First Public-Private Partnership in the world to adopt the Open Procurement Data Standard.
- Wholesale Only, where the company provides other mobile operators access to a 4G/5G services with 90 MHz in the 700 MHz frequency network; therefore, new players can enter the Mexican consumer market at once.
- Cost of Wholesale only network will significantly reduce the service to Mexican customers.
- Mexican Government expects entry of new providers will generate \$13B USD of FDI in 3 years. If fully deployed, we believe that the dollars will be significantly higher

# About Mexcap and Red Compartida

- Mexcap is a Dallas based company who redeploys capital received from the sale of XC Networks and provides consulting services.
- Completed a consulting engagement project for Black and Veatch bid for Red Compartida. This allowed Mexcap to gain deep expertise and understanding of the project.
- This new project is the most important for the Mexican Telecommunications Reform and it is expected that Atlán, the bidding winner, will begin building the network in the coming months and allow for increased competition
- Red Compartida will provide 92.2% of the Mexican population with access to the best communication technology.

# Next Generation Network and How the Network Will Get Deployed

- The Mexican Government will allow the right to use 2 bands in the premium 700MHz spectrum (703-749MHz and 758-803MHz) and a 30,000km backbone fiber pair.
- Red Compartida will sell capacity and services to its clients to both, the ones who already have a network in Mexico and to the ones who prefer to offer service without network (MVNOs)
- Two theories on building the network to meet government requirements:
  - Build a skeleton network which will meet the requirement but that will unlikely be able to handle the traffic of the network.
  - Build a robust network able to handle gigabit level demand profiles, more expensive but will maximize user experience.

# Next Generation Network and How the Network Will Get Deployed

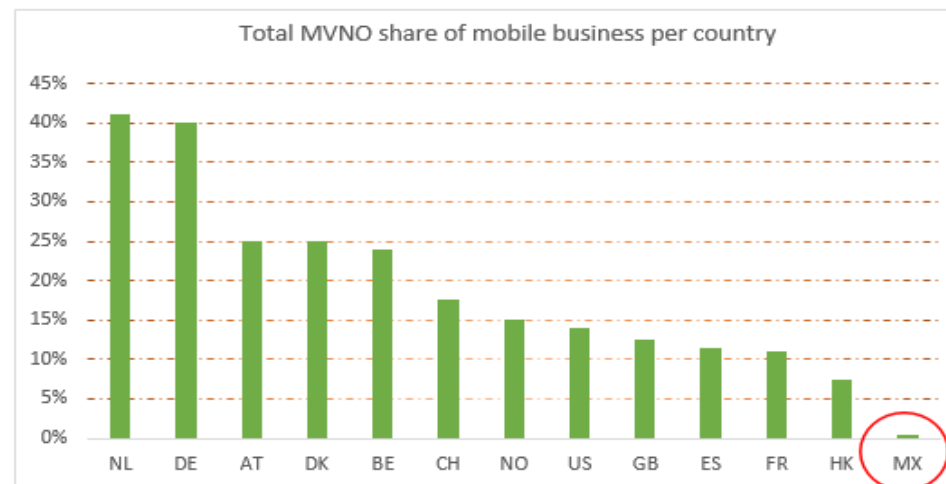
- Mexcap could have three opportunities:
  - Build support facilities for these networks which could be used by other carriers and/or for service to enterprise customers.
  - Start a MVNO that sells and markets this new network to consumers and machine to machine applications.
  - Provide consulting expertise and project management.

# Marketing and Sale Strategy

- The Mexican Government wanted a brand new entrant and prohibited existing carriers from participating in the tender, therefore, partnered with Altán Redes, which will be required to provide capital and expertise to run the network.
- Altán will sell services to MVNOs (Mobile Virtual Network Operators), MNOs (Mobile Network Operators, such as AMX, AT&T and Telefonica) and FNOs (Fixed Network Operators).
- The shared network is regulated mainly on prices, quality and how it is being managed. Altán also has obligations with the Mexican government, which will receive (1) 400M MXN annually; (2) 1% of the network's revenues; and (3) direct and indirect taxes.

# A New Competitiveness Model for Mexico

- Better competitive landscape as entry barriers will disappear, therefore leading to an enhancement in the sector performance.
- Since 2007 14 MVNOs have entered the market and hold less than 1% of the market share. This is a result of lack of incentive (high prices or anti-competitive practices) from MNOs to cooperate with MVNOs to use their networks



# A New Competitiveness Model for Mexico

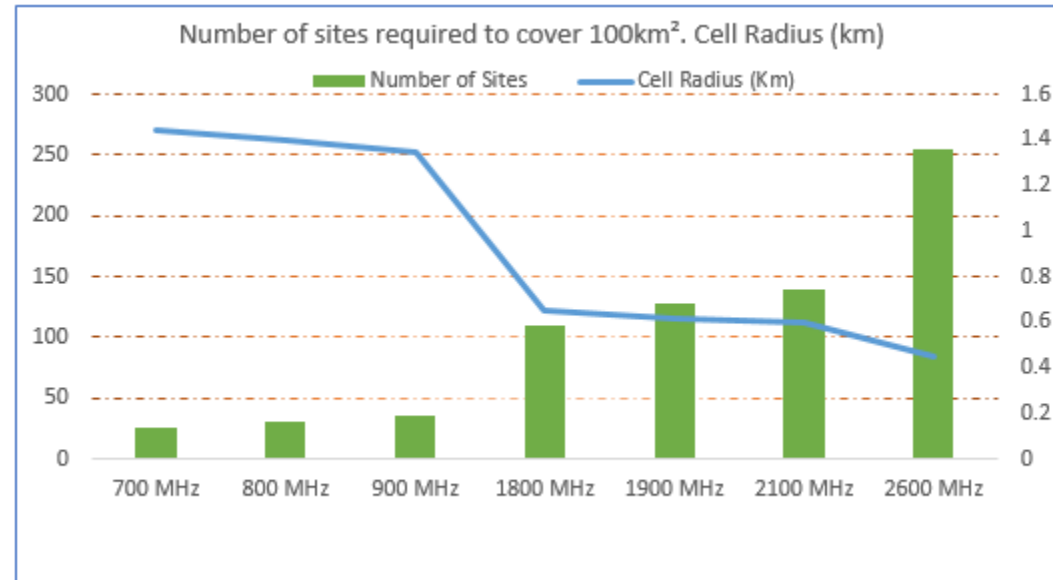
- Since Atlán is not a carrier and will not compete with the company renting services –consortium not allowed to sell directly the final customer-, MVNOs' outlook is much brighter with the Red Compartida.
- With the access to the 700MHz spectrum, MNOs will also have an opportunity to increase their capacity and to reach sparse areas with fewer towers. However, existing MNOs will have to open access to their networks to gain access to Red Compartida, which we believe they will be reluctant to do.



# Current Spectrum Ownership in Mexico

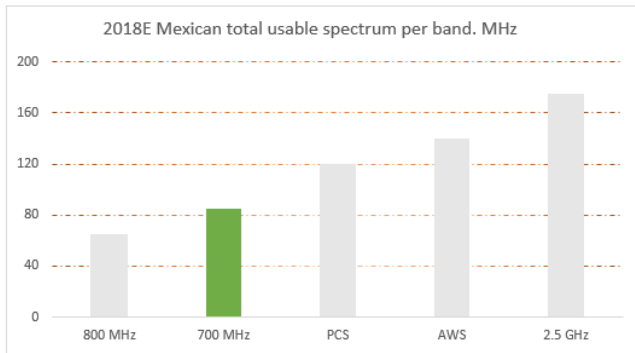
- The 700MHz spectrum has a superior propagation and in-building penetration, requiring fewer sites needed to cover the same area and theoretically less CapEx.
- Atlán will pay significantly less than other spectrum princes ( \$20m vs \$220 on average)
- Mexico has around 324MHz of operating spectrum available for telecommunications, with AMX holding the largest share with 41%, followed by AT&T's 39% share.

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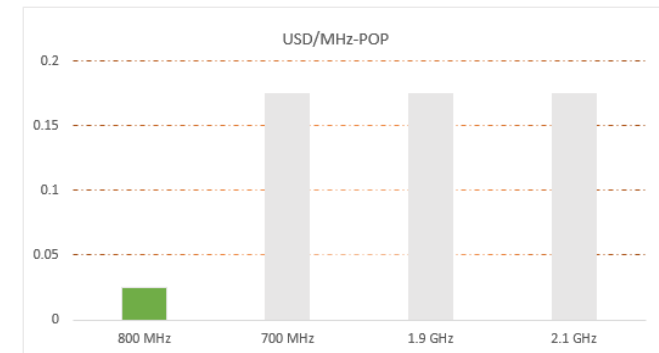


Source: IFT and JP Morgan estimates

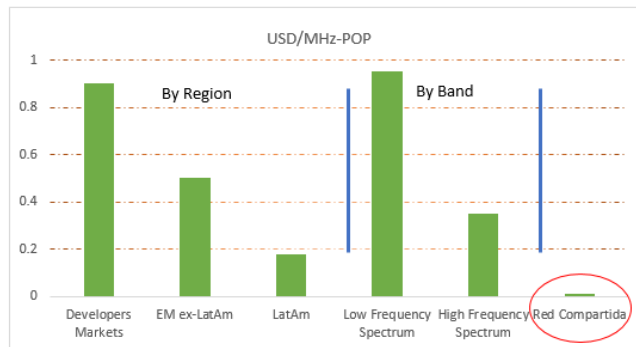
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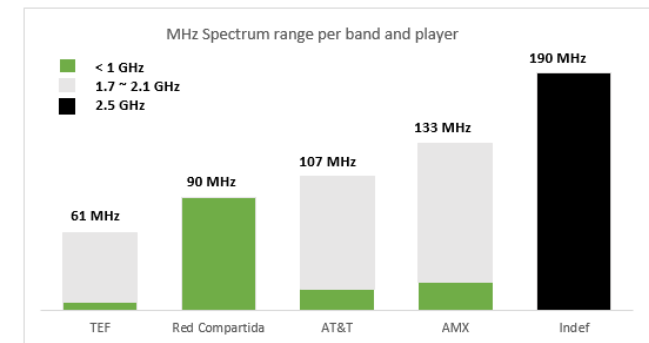
Source: IFT and JP Morgan estimates



Source: IFT and JP Morgan estimates



Source: Company Flings press releases and JP Morgan estimates



Source: IFT and J.P. Morgan estimates. \*Auction scheduled for 1Q17. \*\* Does not take into account iDen spectrum for AT&T

# Opportunities and Challenges for Competitors

- Telefonica - Has a limited amount of sub 1 GHz spectrum, reaching only 25% of the population. Moreover, Telefonica has not invested much in Mexico. The rumor is that Telefonica would like to exit the Mexico market.
- AT&T – Has expressed interest in Red Compartida in order to improve indoor coverage, and expansion of network in some areas depending on the business conditions. MVNO competition is expected to have a limited but negative impact to AT&T long term.
- Impact on AT&T and AMT – AMT Currently has around 33% share of Mexican towers, we believe the impact is clearly positive, but perhaps not meaningful. AMT will benefit from AT&T presence in Mexico, on March 8th, 2017, AT&T announced that it would invest about \$3 billion in Mexico by year end 2018.
- Megacable - Participates with a non-voting 4% stake in the Altán consortium, will be able to offer mobile services through MVNOs, which allows them to offer quad-play services (TV, Internet, fixed and mobile).
- Telesites - Established by a América Movil in a spin-off, is a holding company focused on constructing, installing, maintaining, operating and marketing, directly or through its subsidiaries, various types of towers. Telesites could be a main winner, as Altán could need more than 10,000 sites by 2021. To reduce investments, we expect most of the infrastructure, probably 80%, to be leased from the market leaders in Mexico
- AT&T's competition from MVNOs - We expect AT&T to focus much of its efforts going forward on building a high-quality network to appeal to higher end consumer and business wireless subscribers, which should be less impacted by MVNO competition.

# Challenges for Red Compartida's Infrastructure Deployment

- The Mexican Government is addressing lack of regulation that inhibit carrier's deployment of new infrastructure to allow for aerial, underground and tower construction.
- Today there is poor coverage and many problems that impede customers full access to networks.
- Existing available infrastructure provided by American Tower, Telesites and others could o
- We believe a key factor to deployment of the transport backbone and metropolitan radio access network will be Red Compartida's ability to negotiate dark fiber IRUs and capacity from existing carriers. ffer a partial solution but is often too expensive or inadequate to handle loads and capacity.
- Another very important issue to resolve will be the coordination between Red Compartida and the USA government (FCC) for the interference and frequency coordination for the use of 700 MHz along the US Mexico border.
- If Altan can finance this project and existing carriers do not conspire to block its deployment, Red Compartida will be Mexico's largest and most important technology initiative in its history.

# About Mexcap and its Principals

Mexcap is an entity focused on redeploying capital received from the sale of XC Networks and providing consulting services to entities who want access to their expertise and experience of its former executives.

- **Thomas J. Spackman** - Managing Director of Mexcap and the CEO of BCP Distributions, the liquidating entity of XC Networks. Licensed attorney in the state of Texas and a member of the Federal Communications Bar.
- **Arturo Bedolla** - He is the Managing Director of Mexcap. Prior to its sale in November of 2013, Mr. Bedolla was president of XC Networks where he led the operational, sales and technical functions of the organization, both in the United States and Mexico.
- **Harish Raman** - He is a Managing Director of Mexcap. Mr. Raman was Chief Financial Officer to XC Networks prior to its sale. Mr. Raman has extensive experience in financial advisory, merger and acquisitions, investment banking, corporate finance and technology management.
- **Mariana Via** - She has 10-year experience in the research and consulting industry as a Strategy Analyst in the Mexican Market for eCommerce, Telecommunications and Banking. She earned her undergraduate degree in Economics from Universidad Iberoamericana in Mexico City and holds a Master in Science Administration degree from Central Michigan University