

European Wireless Infrastructure Association Report

Executive summary report on the economic contribution
of the European tower sector

March 2015



Building a better
working world

2 Executive summary

- 2.1 Communication towers provide the essential 'passive' infrastructure on which public communication network operators (Network Operators) such as Mobile Network Operators (MNOs) and other network operators (including fixed line wireless broadband, broadcast, emergency services and machine to machine networks) place the 'active' equipment which is used to transmit data to enable mobile and other network services. There are over 400,000 developed communication sites in Europe today including around 300,000 towers, with growth expected as mobile broadband speeds accelerate and data volumes increase rapidly.
- 2.2 Towers can be owned or managed by either Network Operators (mainly MNOs), or by wholesale wireless infrastructure providers (TowerCos). TowerCos currently manage around 20% of towers in Europe. TowerCos differ from MNOs in that they invest in communication towers solely for the purpose of providing wholesale access to Network Operators on a shared basis.
- 2.3 TowerCos play an important role in enabling the telecoms industry to make most efficient use of its passive infrastructure, and therefore in reducing costs for Network Operators and in improving service coverage across Europe. As Tom Wheeler (Chairman of the US Federal Communications Commission) noted in a recent address to the US tower sector (where over 80% of wireless infrastructure is outsourced), "every day the infrastructure builders and owners and those who help upgrade our network are key to meeting the national broadband goals that President Obama has set" and that wireless infrastructure companies were "the reason we are leading the world in 4G LTE deployment."
- 2.4 There are significant fixed costs involved in constructing and maintaining towers. However the costs to industry can be significantly reduced if more efficient use is made of towers: Increasing the utilisation rate of each tower ensures that the unit costs for Network Operators can be much lower. It makes it cost effective to improve service coverage, including to areas where it is currently unprofitable for Network Operators to invest in additional infrastructure – such as in rural areas. Furthermore, by reducing the pace at which new towers need to be constructed it enables the faster rollout of wireless broadband network expansion and upgrade.
- 2.5 Improving the utilisation of passive infrastructure is therefore valuable for delivering the EU Digital Agenda for 2020, which promotes access to faster data speeds across Europe and particularly in areas with poor service quality today.
- 2.6 TowerCos have a proven record of increasing the utilisation rates of towers acquired from MNOs and from other Network Operators. Analysis of the rate of networks per tower (co-location ratios) – which is a major contributing factor to tower utilisation – shows that TowerCos are able to achieve significantly higher utilisation of towers through providing access to multiple operators. The higher rate of co-location achieved by TowerCos reduces the need to build more towers, speeds up deployment and reduces Network Operator lifecycle costs. TowerCos have also proven themselves able to drive down operating costs and achieve a lower cost of capital as a result of towers being their core business and so having greater expertise in the delivery of passive infrastructure.
- 2.7 Over recent years the TowerCo sector has seen an expansion in the share of the towers that they manage – both globally and within the EU. This has principally been driven by MNOs facing a need to realise cash for investment in rolling out 4G or for market expansion. MNOs and other Network Operators have also been driven to sell off towers by the desire to achieve cost efficiencies and to concentrate on their core market service line.
- 2.8 However there remains scope for a substantial further increase in the size of the TowerCo sector, as is illustrated by the US market where the share of towers managed by TowerCos is 84%, compared with only 20% in Europe today. EY estimate that an increase in the degree of outsourcing to TowerCos (i.e., to match the levels seen in the US today) would have a net benefit of €23 billion to the European economy over the next decade, and could reduce the

number of new towers that would need to be constructed by 80%. In addition, EY estimate that outsourcing to TowerCos can unlock €27 billion in capital investment by allowing MNOs to release capital by selling their passive infrastructure to a TowerCo.

- 2.9 There are alternative ways in which the industry can reduce the cost of passive infrastructure. One is through greater cooperation between network operators – e.g., MNOs forming joint ventures with each other and agreeing provisions for pooling their joint network assets. Another model is through market consolidation: MNOs merging or acquiring other MNOs reduces the necessity for sharing infrastructure as each MNO's network will be serving a greater share of the market.
- 2.10 While much of the efficiency gains from sharing passive infrastructure could also be achieved through closer cooperation between MNOs (as is currently occurring with the increase in RAN-sharing), TowerCos provide a means of sharing passive infrastructure in a way that is pro-competitive and reduces barriers to entry for new MNOs and other Network Operators. Infrastructure sharing through TowerCos therefore makes it easier for new companies to enter the market – or for existing MNOs to expand – as they can secure the wholesale services they need to establish a network with consistently high service quality from the TowerCos.
- 2.11 Given the significant growth in mobile data services, and the importance of improving access of the population in Europe to high speed broadband, TowerCos can play a vital role in lowering costs for network deployment and improving access to high-speed broadband across Europe.

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