Let's face it

- Core telco revenues – the decline is here to stay: -1.8% p.a. until 2015e
- Over-the-top services: a major threat for mobile but an opportunity for fixed-line
- Diversification into adjacent markets can add significant revenues, but not enough to stabilise the top-line
- Big opportunities to transform costs
- Mega-operator, local hero or infrastructure play: different telcos will make different strategic choices
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Executive Summary

This 11th edition of the joint annual report by Exane BNP Paribas-Arthur D. Little focuses on the consequences of the move to ‘all IP’ for European telecom operators. Is the opportunity linked to innovative services larger than the risk to legacy revenues? What are the key strategic choices available to telcos across Europe? In preparing the report, we have met with 105 organisations in the telecom-media-technology arena and beyond, across 15 countries.

– All in all, we see core telco revenues continuing to decline by 1.8% p.a. until 2015e.
– The move to all-IP enables anyone to propose IP-based services over any network. This is the ‘over the top’ (OTT) concept.
– In fixed-line, OTT TV is more an opportunity for telcos than a threat – an opportunity to gain market share in TV and to accelerate super-fast broadband adoption.
– In mobile, OTT is a direct threat to legacy voice and SMS revenues. SMS can be displaced rapidly by independent and embedded messaging applications. Operators are taking defensive steps, but the downside risk remains significant.
– In an all-IP world, everything will be connected. This creates opportunities for telcos in adjacent markets such as automotive, energy and utilities, financial services, etc. We estimate potential revenues at 4-9% of large telcos’ revenues by 2015e, significant but not enough to reverse the overall negative trend.
– In this context of prolonged revenue pressure, telcos must accelerate their cost transformation. We identify large cost saving opportunities both in opex (“online-centric” business model) and in capex (network consolidation/sharing).
– Operators will increasingly make different strategic choices: 1) ‘mega-operators’, competing (and collaborating) with OTT providers which will require both scale and a range of new capabilities – likely to lead large incumbents to make acquisitions; 2) ‘local heroes’, with limited geographic footprint and a presence in some vertical businesses; 3) ‘infrastructure plays’, focusing on the network while developing a range of partner agreements in services and distribution.

Figure 1: Contributions to the sector growth – core telco revenues

Source: Arthur D. Little, Exane BNP Paribas estimates
Let’s face it, the decline in core telco revenues is here to stay

We expect core revenues from European telecom services to continue decreasing until 2015e, by 1.8% per year on average, including a CAGR of -2.4% in mobile and -3.4% in fixed-line, partially offset by +5.8% in pay-TV.

The expectation of a decline is consensual among industry participants, but even though we expect strong growth in mobile data (the single most important growth driver in the sector), our overall forecast is more bearish than consensus.

In a nutshell, we expect the 2011 trend (-2%) to continue in the coming years, for three key reasons: 1) the risk of cannibalisation of voice and text revenues has significantly increased, with over-the-top services developing fast; 2) in fixed-line, broadband and pay-TV are far from being big enough to offset the decline in traditional telephony; 3) the tough economic context is here to stay, with a direct impact on usage and indirect impacts on competition and consumer behaviour.

For incumbents in their domestic markets, we model core revenues down 3.6% p.a., given their higher than average exposure to fixed telephony, despite our expectations of improving broadband market share and increasing pay-TV market shares.

The largest uncertainty in the sector is mobile data monetisation: even a small tweak to our 2015e assumptions regarding traffic per smartphone and revenue per GByte could lead the whole sector to return to growth. On the other hand, stronger cannibalisation of voice and text could lead to an even faster decline (-3.8% CAGR).

However, our analysis of mobile operators’ return on capital employed shows that a return to growth is too optimistic, as it would imply operators’ increasing their returns despite the tough environment (economy, competition, regulation, network capex) – while the bear case would imply returns of challenger mobile operators falling significantly below their cost of capital, hence driving massive consolidation.

OTT: risks in mobile larger than opportunities in TV

The ‘over the top’ concept is well know for TV – but actually it applies to all telecom services, including mobile.

As smartphone adoption increases, new applications enable users to save on their bills by using mobile voice over IP instead of traditional voice, and messaging instead of traditional SMS. This risk is not new but it is accelerating, as: 1) smartphone penetration has grown strongly; 2) WhatsApp is one of the three most downloaded paid iPhone applications in nine European countries; 3) Google, Microsoft, Apple, etc. all have an interest in upping their game in communication services and the growing integration of hardware and software gives them more firepower.

In a bear case scenario, our 2015e mobile revenue estimate – which is already 9% lower than the 2011e figure – would be cut by another 8%.

In terms of fixed-line, over-the-top TV offers are evolving very quickly, for both hardware and services – all made possible by ever faster broadband. Viewing habits are changing fast, with a massive generational effect. From the perspective of incumbent pay-TV providers, OTT TV is a threat – but from telcos’ perspective, OTT TV is in our view a positive, on balance: 1) telcos have limited exposure to downside in the traditional pay-TV market; 2) for them, playing the OTT game is an opportunity to differentiate from established pay-TV players; 3) OTT TV should have a positive impact on fixed broadband, pushing towards faster speeds, provided that operators are able to link speeds with higher ARPU.
To make the best of this new world and avoid cannibalisation, the most effective moves expected from telcos are: 1) price bundling – which we think can basically halve the risk of cannibalisation of mobile operators’ legacy revenues; 2) tiered pricing, in mobile but also in fixed – to make sure that revenues increase in line with traffic growth; 3) leveraging ‘the box’, in fixed-line; and 4) developing wholesale revenues from OTT providers, although this is difficult to quantify except for Content Delivery Network (CDN) activity.

**Diversification opportunities: working hard… for the long term**

When not only everyone, but also everything is connected, surely telcos should benefit. How big is the ‘internet of things’ opportunity overall? How can telcos best position themselves? Will this new world restore growth to the sector?

Thanks to IP technology, a multiplicity of devices will be connected, beyond mobile phones, computers and tablets: cars and other moving objects, utility meters (electricity, gas, water), but also other home appliances or vending machines, as well as medical devices. Mobile phones will become electronic wallets (m-payment). Finally, the increasing power of IT infrastructure, combined with broadband everywhere, is a key driver for remote provision of IT services – this is the ‘cloud’ opportunity.

Each of these device types relates to specific ‘vertical’ markets; e.g. automotive, energy and utilities, healthcare, financial services, etc. Each of these is a large market in itself compared to the telecom market, and each can benefit from the ‘smartisation’ of devices, which can bring cost savings as well as enable innovative services to customers.

Most of these are very long term opportunities – and opinions on the probability of telcos’ success are divided. We estimate the total potential for incumbent telcos to be 4-9% of their revenues by 2015e – significant but not enough to reverse the revenue pressure elsewhere.

The largest operators are already positioning themselves and we believe that payment, cloud services, moving objects (including connected cars and fleet telematics) and building surveillance and automation are all interesting areas to explore. Nevertheless, if they are to capitalise on these opportunities, operators will need to be more proactive about extending their value chain positions, potentially by acquiring early movers in the market.

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*Figure 2: Revenue opportunities from diversification into ‘verticals’*

<table>
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<th>Total telco revenues, EURbn in 2015e, “believers’ case”</th>
<th>Outlook for incumbents’ revenues</th>
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<td>CDN, 1.2</td>
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<td>Smart metering, 0.5</td>
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<td>Vending machines &amp; payment terminals, 0.4</td>
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<td>Others, 0.5</td>
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**Source:** Arthur D. Little, Exane BNP Paribas estimates
Increasingly divergent strategic routes – and no silver bullet

Telcos have different visions of the industry’s outlook (more or less negative), different views on key assets to leverage (the infrastructure or the customer), but also very different starting positions (leaders versus challengers, local versus global).

Figure 3: Three potential strategic choices for telcos

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<th>Geographic footprint</th>
<th>Ambition in the value chain</th>
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<td>Services</td>
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<td>Global</td>
<td>Mega-operator</td>
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<tr>
<td></td>
<td>Local hero</td>
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Source: Arthur D. Little, Exane BNP Paribas estimates

It is therefore no surprise that they consider a wide range of strategies, with varying levels of emphasis on the retail side (this is the ‘bit pipe’ versus ‘full service’ operator debate) and varying ambitions in terms of geographic footprint (with most European telcos focused on one or a few countries, but a handful looking at a global footprint). Combining these two axes, we find three key strategic routes: 1) the mega-operator; 2) the local hero, i.e. the full service telco focused on a limited geographic footprint; and 3) the local infrastructure play. We believe that:

- The ‘mega-operator’ approach can in theory create the most value in the long term, but is the most difficult to execute (need for capital and multi-faceted competitive challenges), so the most risky. In any case only a handful of European telcos can play;
- The ‘local hero’ could lead to a slightly better top-line than the ‘infrastructure play’, but it comes with additional opex and capex in the next few years along with execution risks. Due to its focus on one or a few countries, competitive structure in its home market will have a material impact on its success;
- The ‘infrastructure play’ is the least risky but also brings the lowest returns in the long term. In any case, it cannot be implemented by operators lacking opex flexibility – due to the requirement to be the ‘low cost’ producer.
Accelerating the pace of change

We look at the key prerequisites for telcos to succeed:

1) leaner cost base, with notably a large opportunity from the ‘online transformation’ of the business model, which we estimate could reduce a typical integrated operator’s total opex by 9% by 2015e;

2) strong infrastructure. This requires continued capex notably on FTTx and 4G – hence local scale will matter more and more. Different types of network consolidation can enable typical mobile operators to save 10-30% of network costs (opex+capex) in the coming years.

Combining these two transformation opportunities could theoretically enable an operator with revenues declining by 2.4% p.a. until 2015e (in line with our industry scenario) to limit the decline in its EBITDA and OpFCF to less than -3% p.a., versus an OpFCF CAGR of -12% in a theoretical scenario with flat opex and capex.

Figure 4: Potential opex and capex transformation to alleviate revenue pressure

![Figure 4](image)

Source: Arthur D. Little, Exane BNP Paribas estimates

Importance of global stature

Finally, we conclude that global scale will become more significant in the long run, both in terms of cost (global purchasing, global pooling of IT infrastructure) and as a commercial differentiator (in a few market segments).

Since each operator has room to optimise its strategic footprint and pressures on the top-line will not ease quickly, we predict a flurry of M&A: at the local level (fixed-fixed, mobile-mobile, fixed-mobile), vertical (acquisition of incremental capabilities to serve adjacent markets), but also cross-border (most probably small moves rather than big jumps, even though large deals cannot be entirely ruled out in the medium term).
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Telecom operators / Cable / Satellite
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Regulators and others
AGCOM, CMT, ETNO, GSMA, RTR, Swedish Post and Telecom Authority, vatm
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Telecom Operators

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