

US Telecom Services

May 2004

Coverage views: US – Neutral;
Canada – Neutral; Latin America – Neutral

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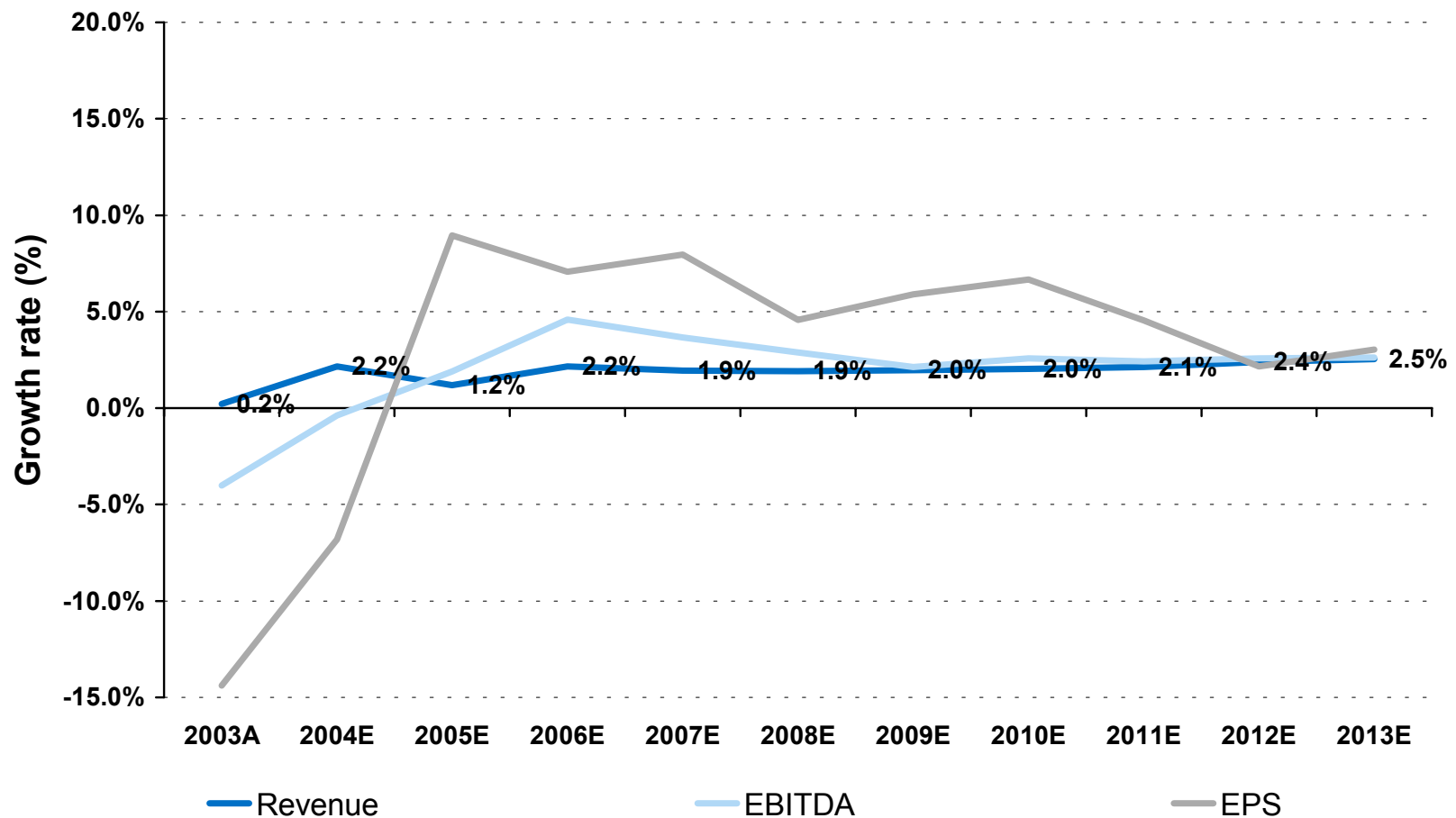
Risk from VoIP appears manageable for RBOCs

- Revised long-term models show positive revenue and earnings potential thanks to:
 - Wireless
 - Broadband
 - Enterprise

- Which we believe is enough to offset core wireline erosion to:
 - VoIP (20% line loss)
 - Wireless (20% line loss)
 - 2nd Lines (10% line loss)

Positive long-term revenue, EBITDA, and EPS growth, in our view

RBOC yoy (%) Growth Profile



Source: Goldman Sachs Research estimates.

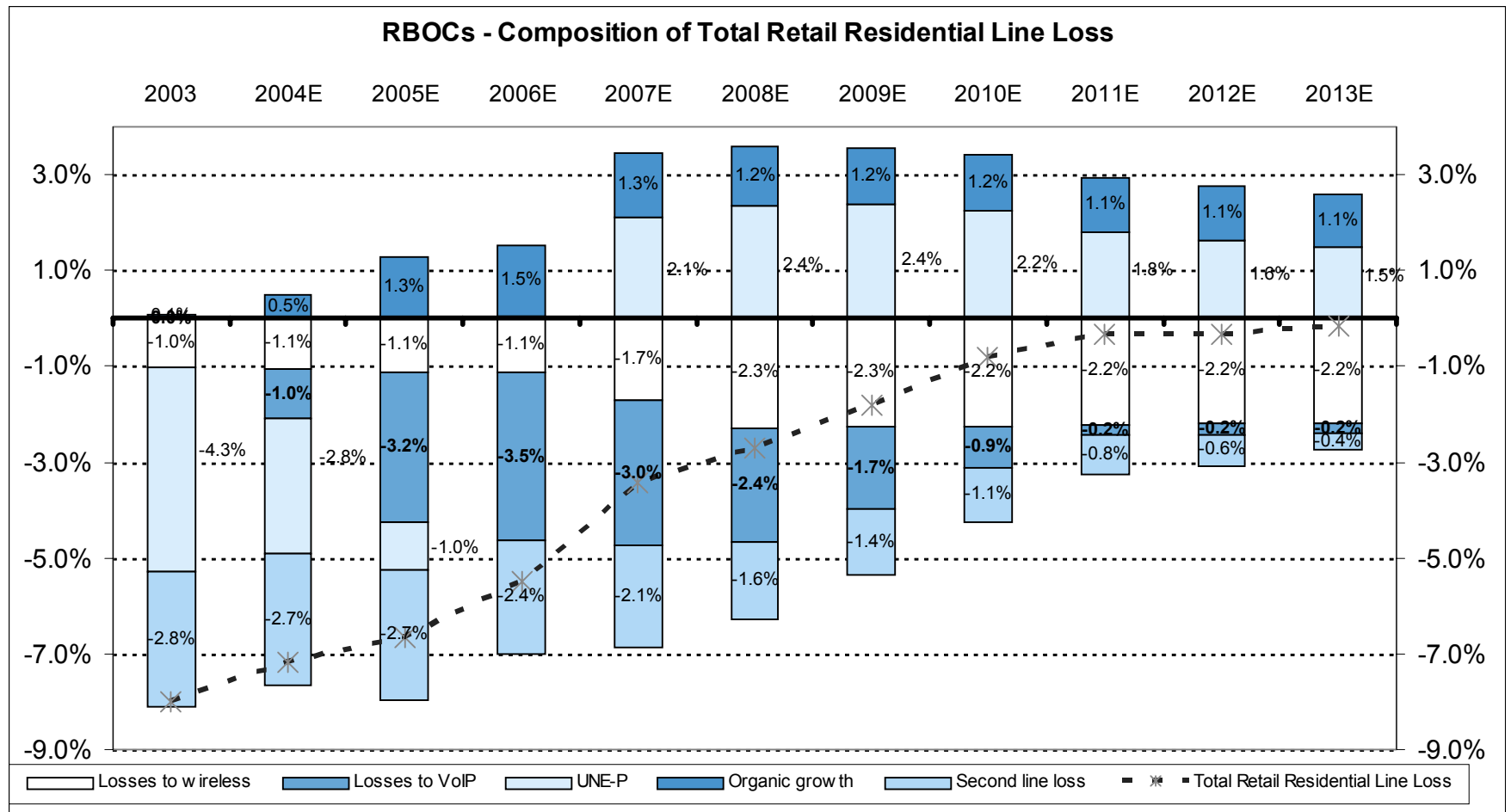
VoIP Outlook

- **Cable is the primary VoIP threat.**
- **For the RBOCs capturing 50% of broadband is key in terms of defensive positioning, in our view.**
- **Standalone VoIP suppliers appear less threatening.**
- **Line loss to VoIP should be manageable because of offsetting growth from wireless, broadband, and enterprise.**

Line loss assumptions

- **Cable telephony:** total broadband penetration goes to 80% ultimately; cables/telcos share net adds 50/50 starting 1Q2004; 30% of cable modem customers take cable telephony within four years of initial offer; ultimate cable telephony share of residential primary lines is nearly 20%.
- **Wireless substitution:** takes 1% of primary line base in 2004 and 2005, and then accelerates to 2% of base thereafter. Cumulative share of base in 2013 is nearly 20%.
- **Second line erosion:** goes to 2% penetration from low teens now.
- **Wholesale – UNE-P** declines over next two years, commercial arrangements kick in, and wholesale (at higher prices than UNE-P) kicks in, ultimately representing 10% of the base.

Line losses appear manageable



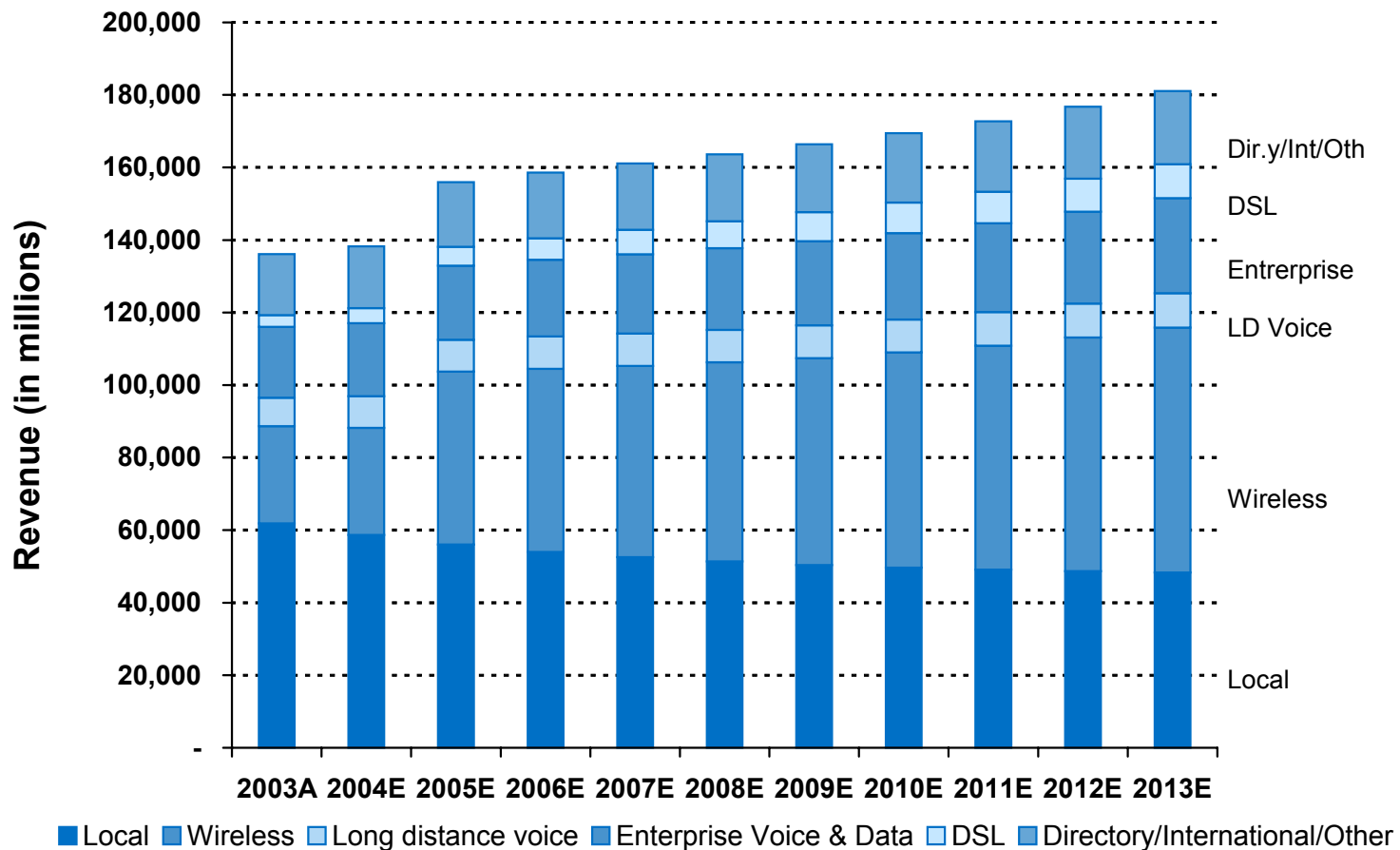
Source: Goldman Sachs Research estimates.

What RBOCs can do to defend their turf

- **Focus on growth areas – wireless and DSL.**
- **Improve retention by selling bundled services.**
- **Continue to evolve networks toward IP architecture so they are not at a disadvantage.**
- **Develop new products and services to take advantage of future IP networks.**

Revenue composition shifts

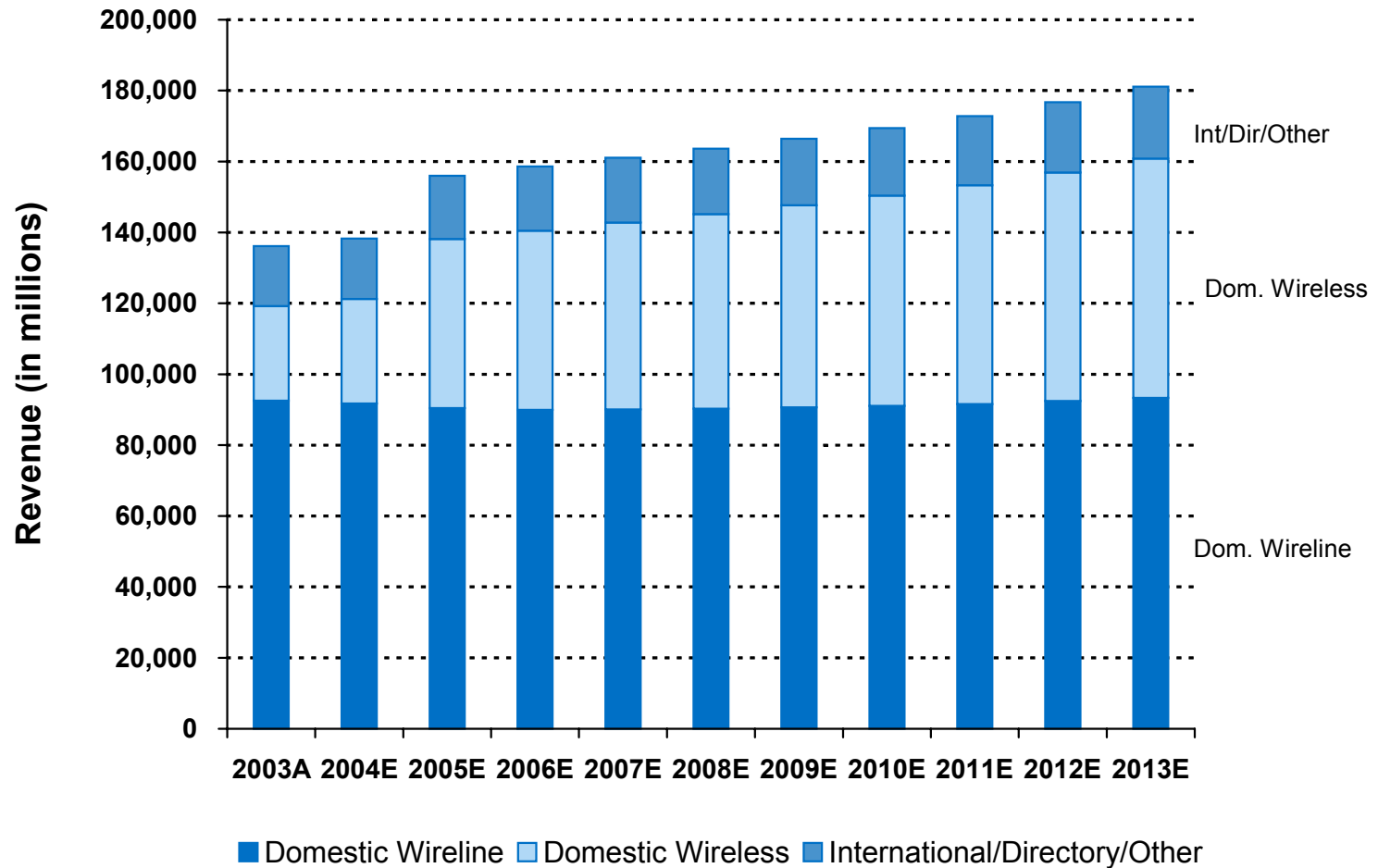
RBOC Revenue Composition



Source: Goldman Sachs Research estimates.

Another take on revenue composition

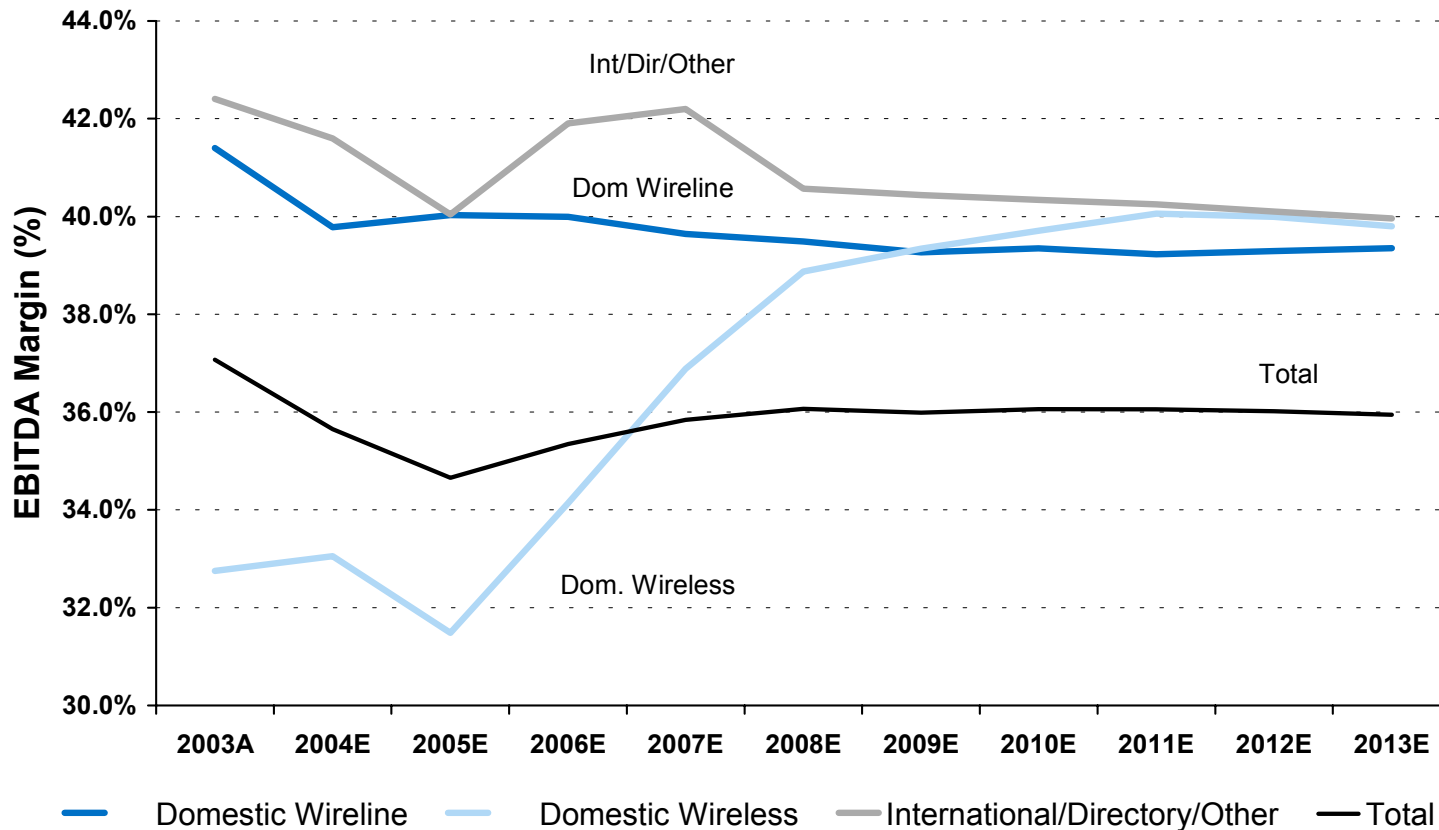
RBOC Revenue Composition



Source: Goldman Sachs Research estimates.

Margins hold up better than expected, owing to the mix shift favoring wireless . . .

EBITDA Margin Evolution

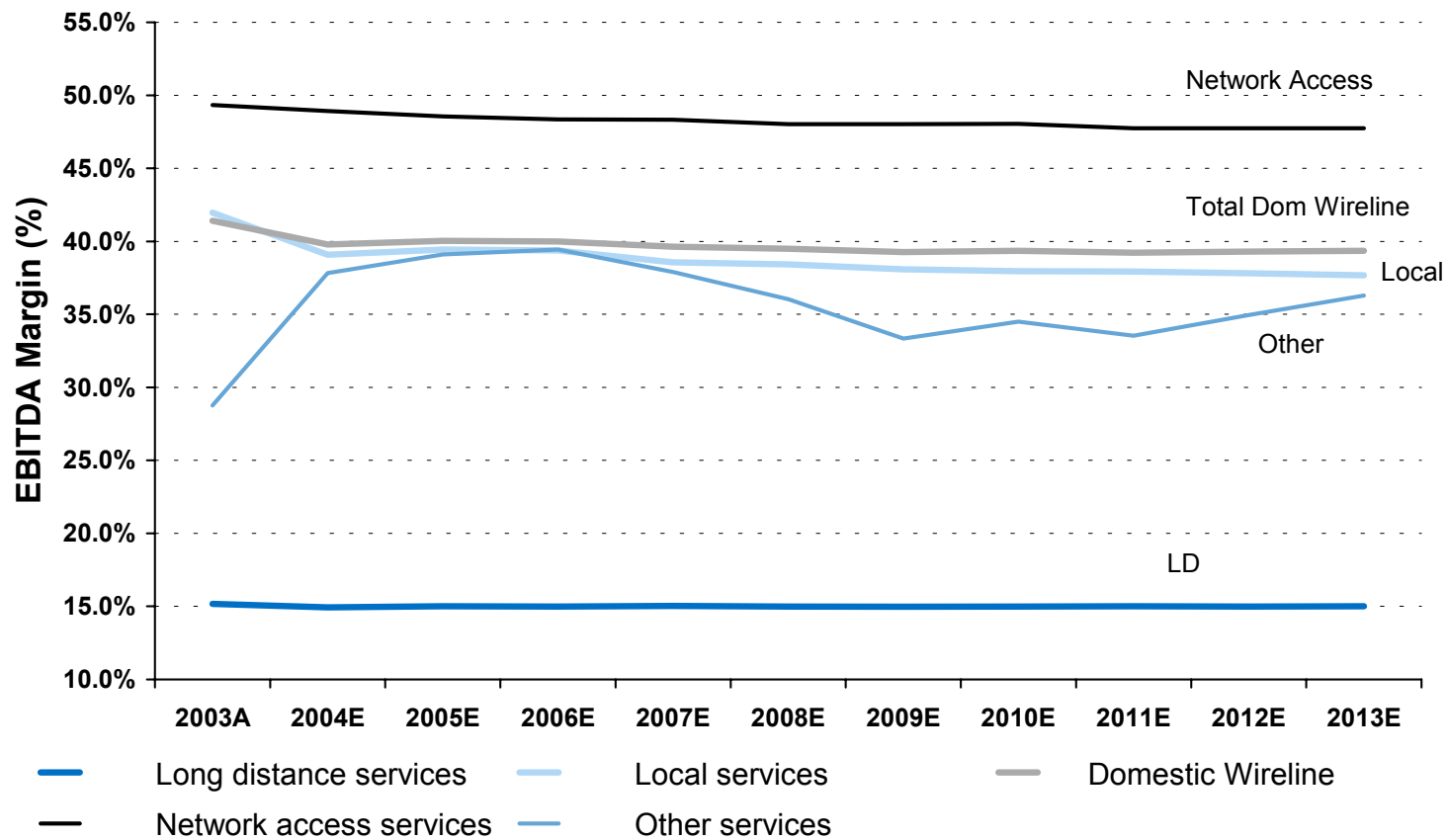


CALCULATIONS EXCLUDE THE PENSION COSTS TO BETTER REFLECT THE TRENDS IN THE UNDERLYING BUSINESS.

Source: Goldman Sachs Research estimates.

... and despite significant margin erosion in local

Domestic Telecom EBITDA Margin Evolution

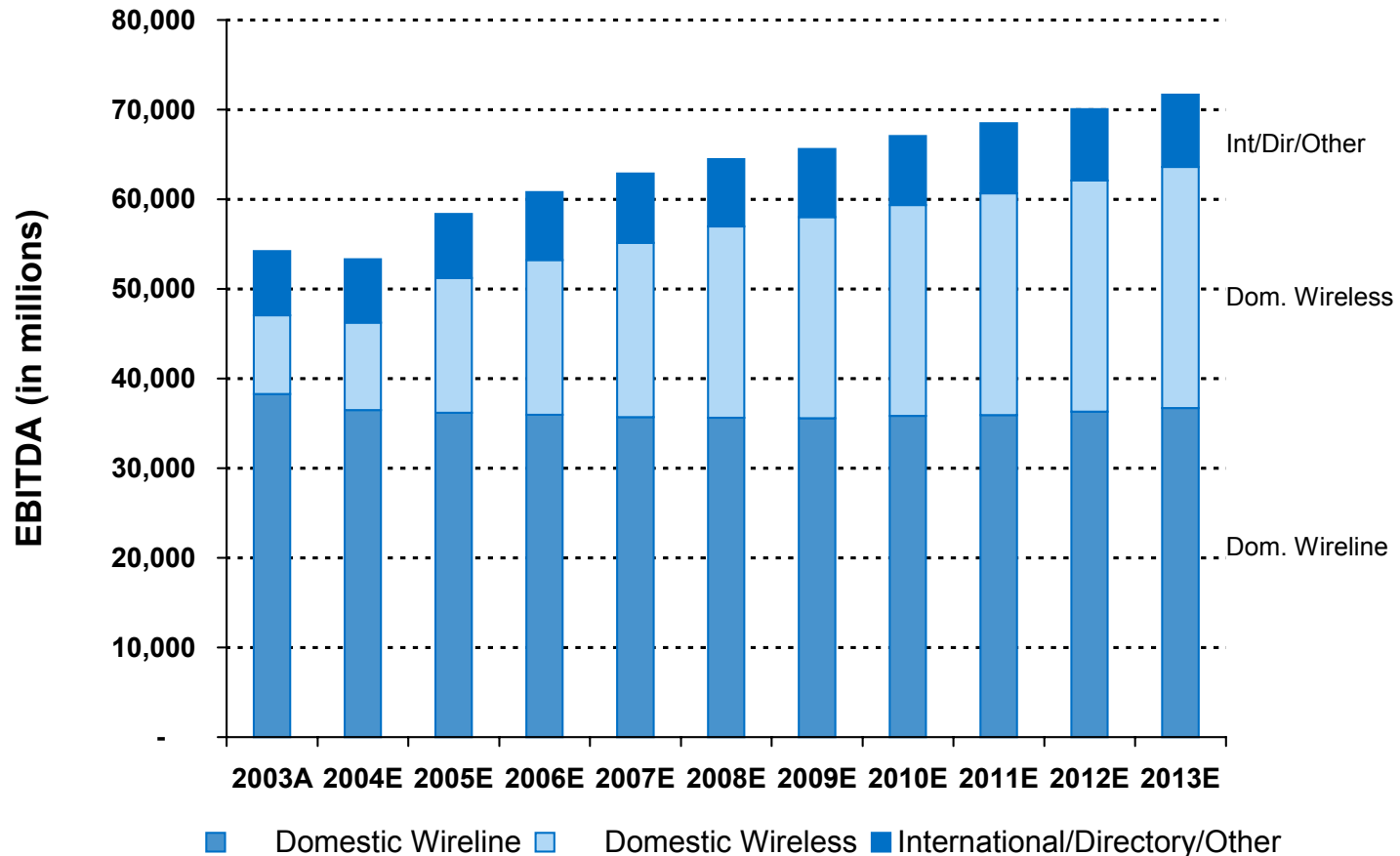


CALCULATIONS EXCLUDE THE PENSION COSTS TO BETTER REFLECT THE TRENDS IN THE UNDERLYING BUSINESS.

Source: Goldman Sachs Research estimates.

EBITDA composition reflects mix shift

RBOC EBITDA Composition

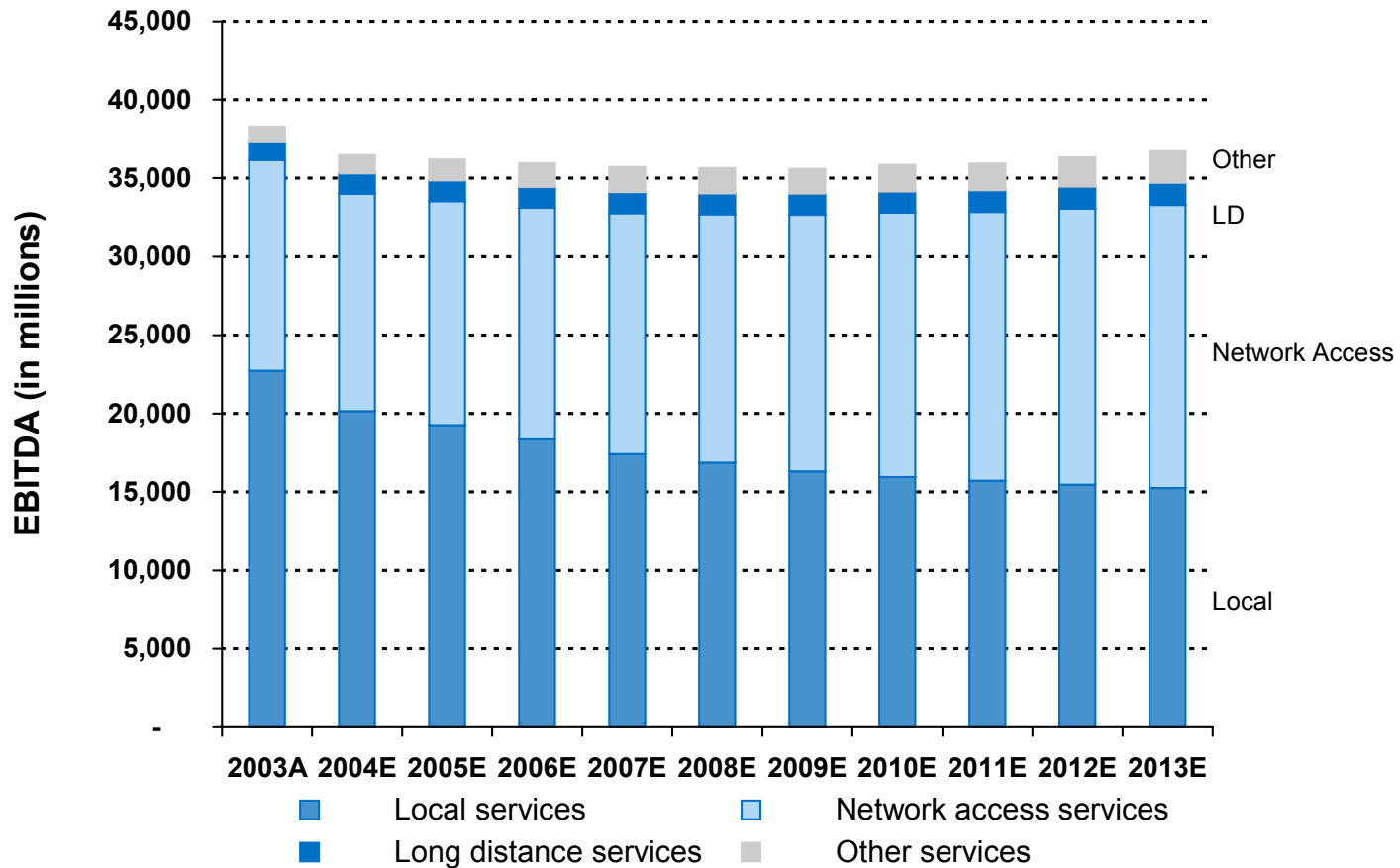


CALCULATIONS EXCLUDE THE PENSION COSTS TO BETTER REFLECT THE TRENDS IN THE UNDERLYING BUSINESS.

Source: Goldman Sachs Research estimates.

Decline in domestic telecom de-composed

Domestic Wireline EBITDA Composition

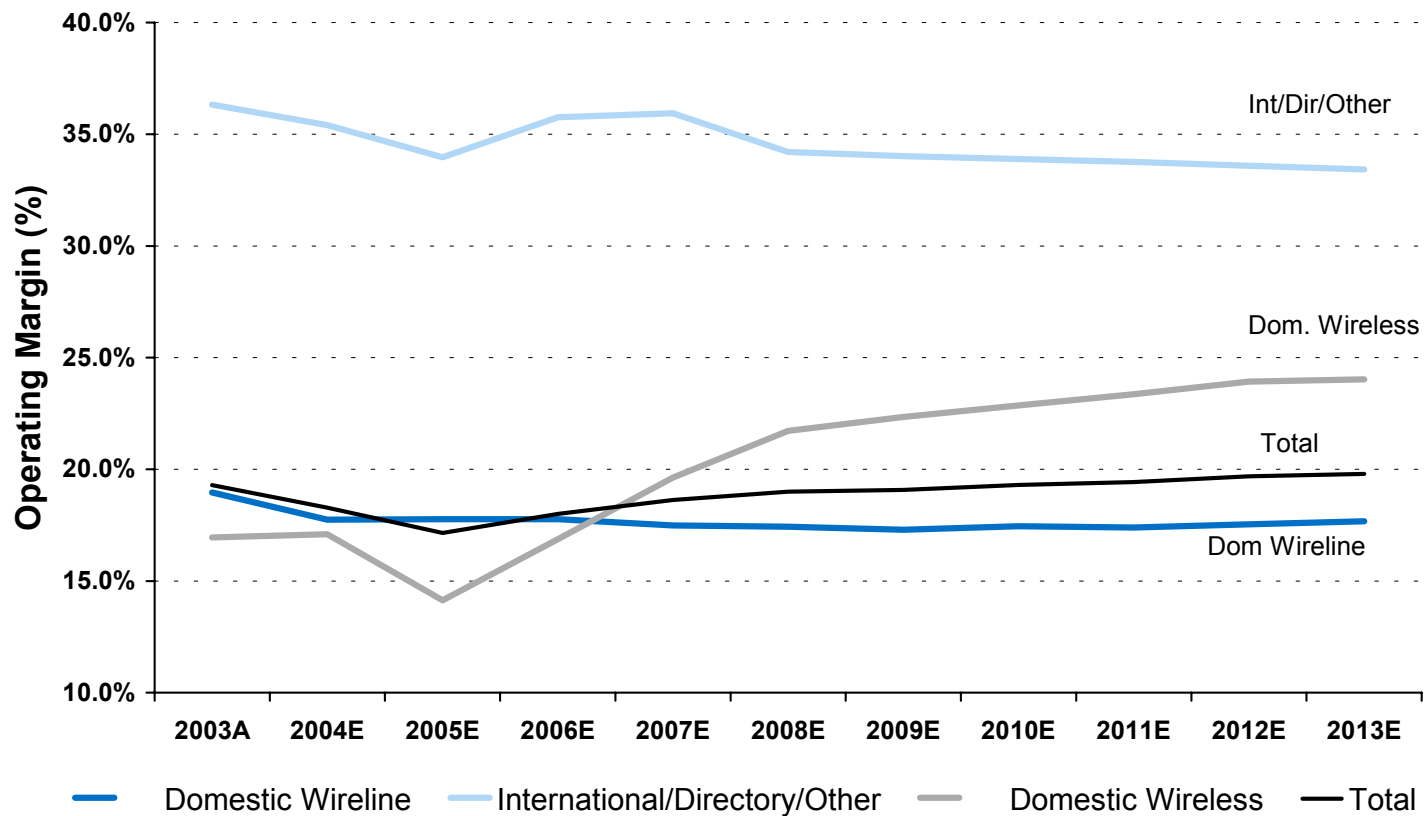


CALCULATIONS EXCLUDE THE PENSION COSTS TO BETTER REFLECT THE TRENDS IN THE UNDERLYING BUSINESS.

Source: Goldman Sachs Research estimates.

Operating income margin trends highlight wireless importance even more

Operating Margin Evolution

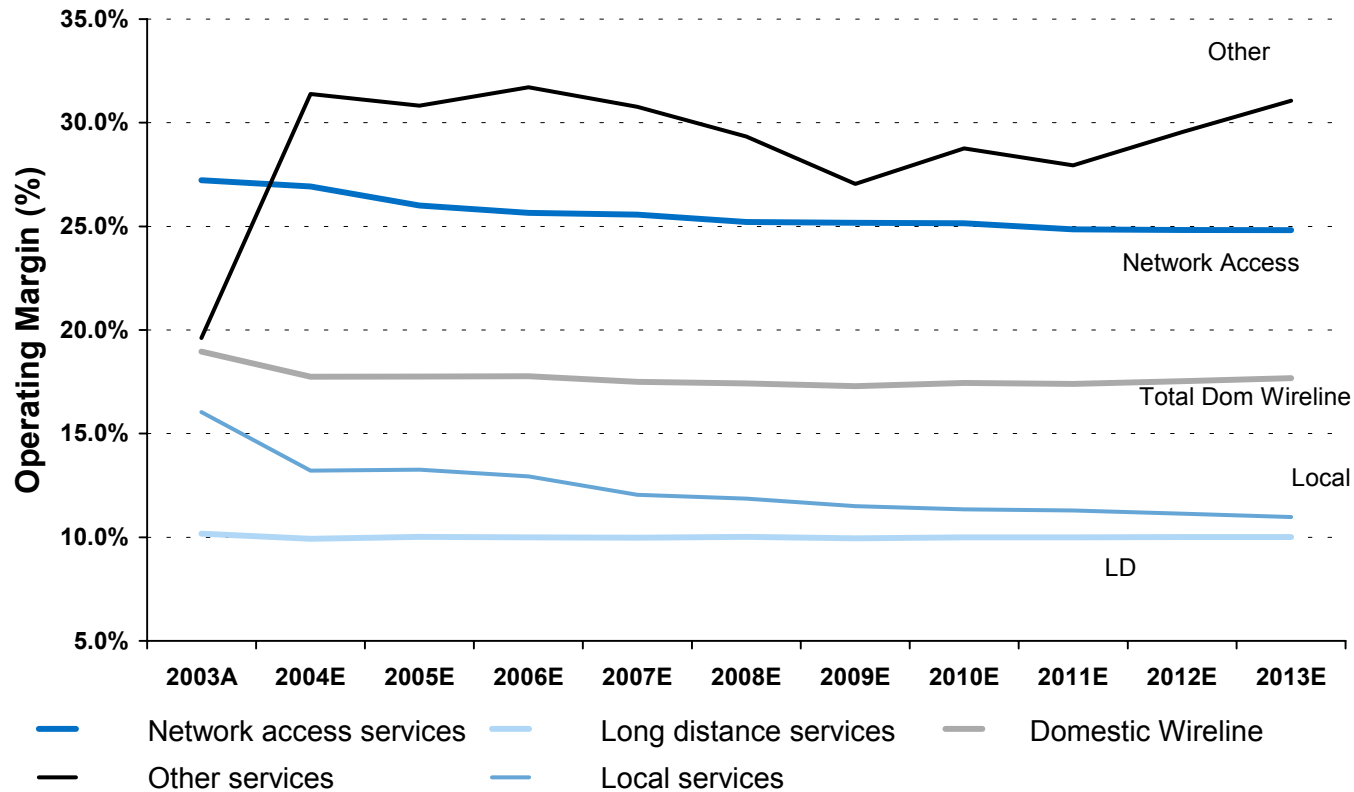


CALCULATIONS EXCLUDE THE PENSION COSTS TO BETTER REFLECT THE TRENDS IN THE UNDERLYING BUSINESS.

Source: Goldman Sachs Research estimates.

Operating margin in local severely declines

Domestic Telecom Operating Margin Evolution

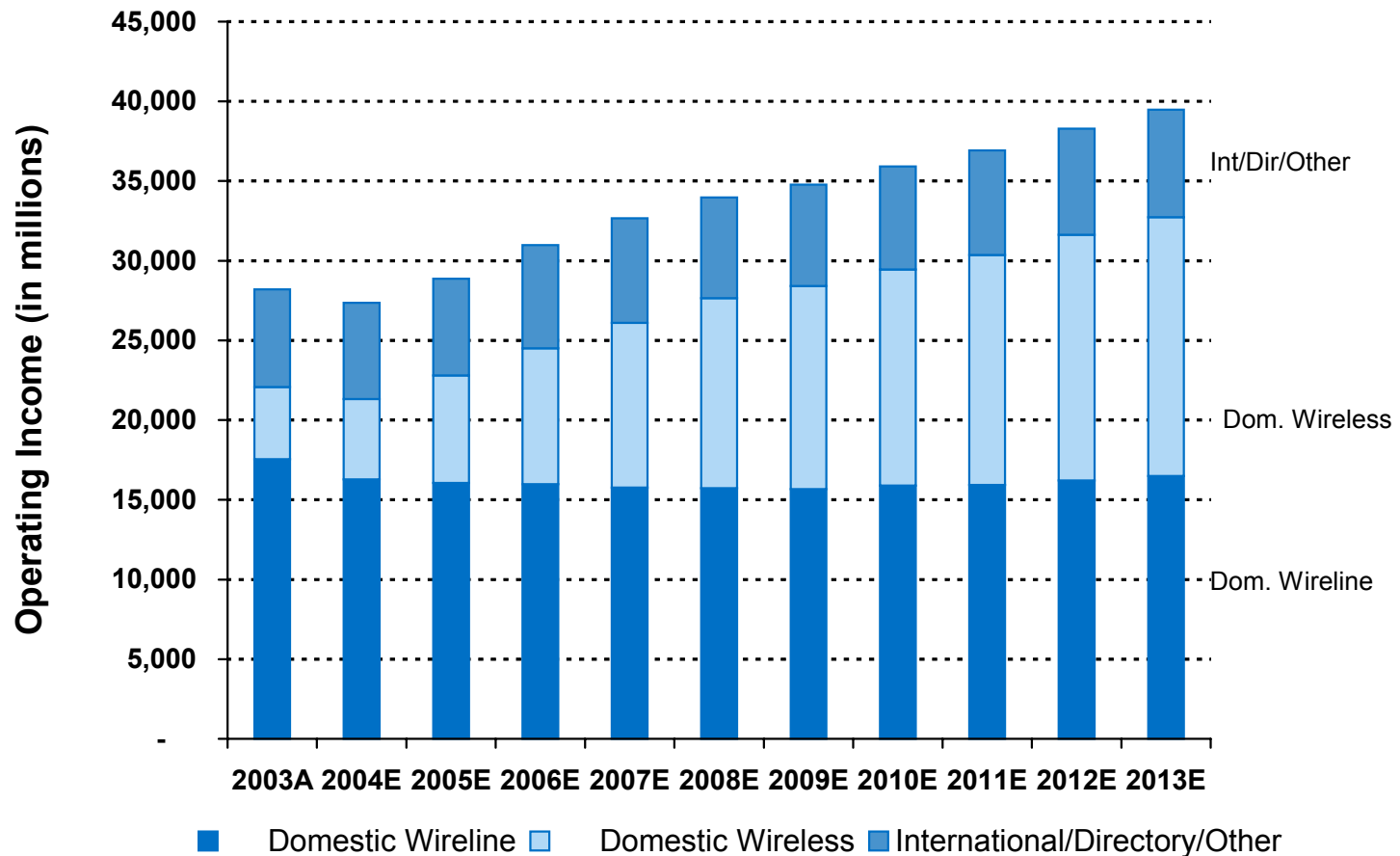


CALCULATIONS EXCLUDE THE PENSION COSTS TO BETTER REFLECT THE TRENDS IN THE UNDERLYING BUSINESS.

Source: Goldman Sachs Research estimates.

Operating income mix shift is big

RBOC Operating Income Composition

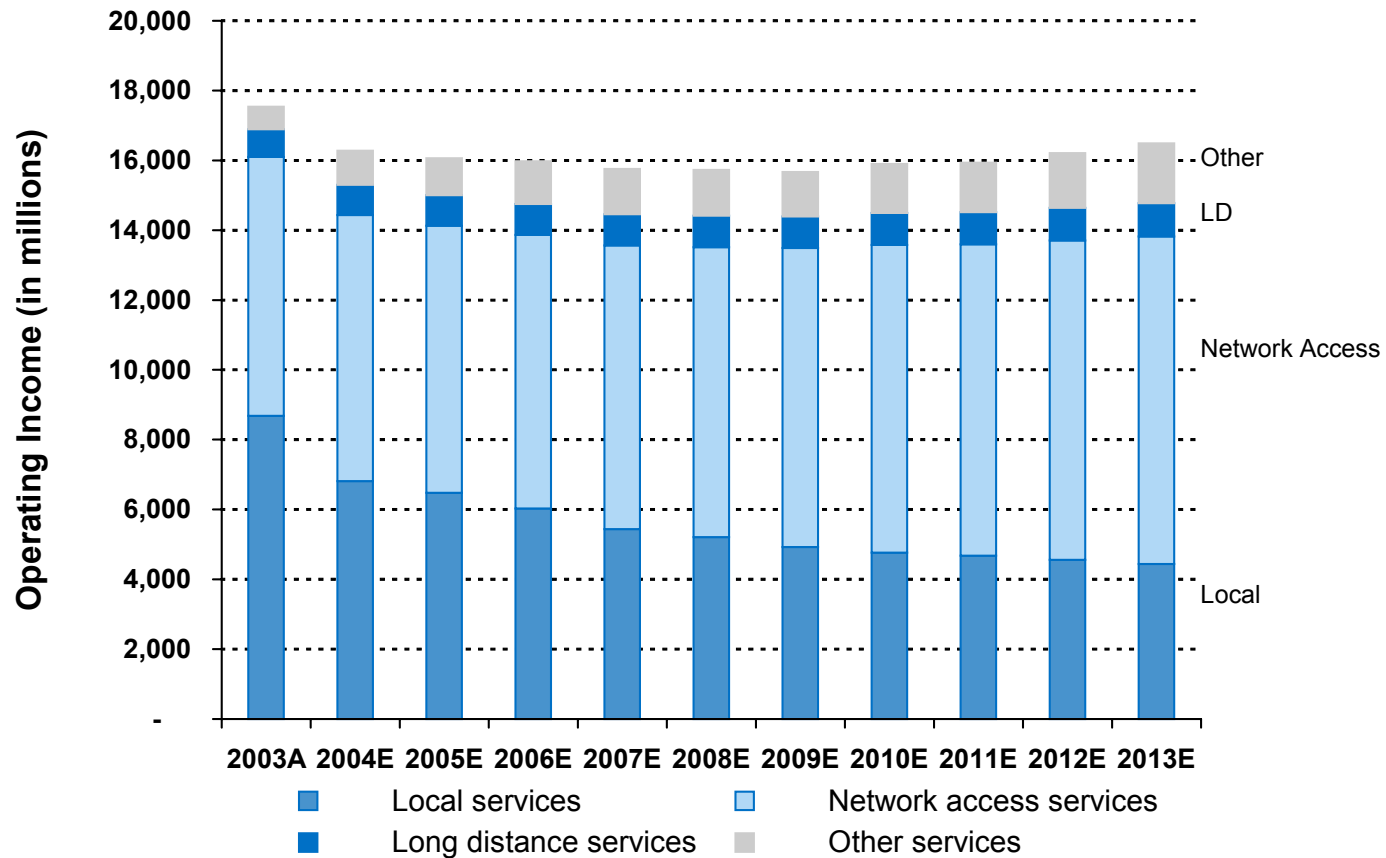


CALCULATIONS EXCLUDE THE PENSION COSTS TO BETTER REFLECT THE TRENDS IN THE UNDERLYING BUSINESS.

Source: Goldman Sachs Research estimates.

Operating income contribution from local falls

Domestic Wireline Operating Income Composition



CALCULATIONS EXCLUDE THE PENSION COSTS TO BETTER REFLECT THE TRENDS IN THE UNDERLYING BUSINESS.

Source: Goldman Sachs Research estimates.

Conclusion

- **VoIP eliminates barriers to entry and should have profound effects.**
- **Cable telephony is the primary VoIP threat.**
- **VoIP market share of lines should reach about 20%.**
- **RBOCs should achieve slow revenue growth due to offsetting growth initiatives.**
- **RBOC profitability sustained through wireless growth.**

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May 24, 2004

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