Technology Workgroup Voice over IP (and IPX) Traffic Survey Results

May 2019

i3 forum

Background

- The i3forum Technology Workgroup conducted a traffic survey to identify the levels and trends of Voice over IP and Voice over IPX traffic within the International Long Distance Market

    Migration to IP and IPX remains core to i3forum mission
    Understand carrier position in IMS service space
    Bolster carrier readiness
    Champion acceleration
    Gain valuable insight into aggregate traffic levels and trends

- Project team included the i3forum chairman, technology WG chair, project lead, and independent 3rd party consultant

    Communication and coordination with all i3f carrier members
    Simple to use Excel carrier input form
    Independent 3rd party to ensure carrier data is completely anonymized
    Optimal reporting of anonymized aggregate traffic data

- Market Insight based on actual carrier traffic data

- 20 (all) i3forum carrier members invited to participate

- 10 carrier members provided traffic data including;
  AT&T, BTS, Deutsche Telekom, Orange, PCCWG, Tata, Telefonica, TI Sparkle, TNZI, Vodafone Carrier Services

Background

Relevant guidelines for carrier traffic inputs

Context:

Carrier responses based on how traffic is managed on their own company's voice network

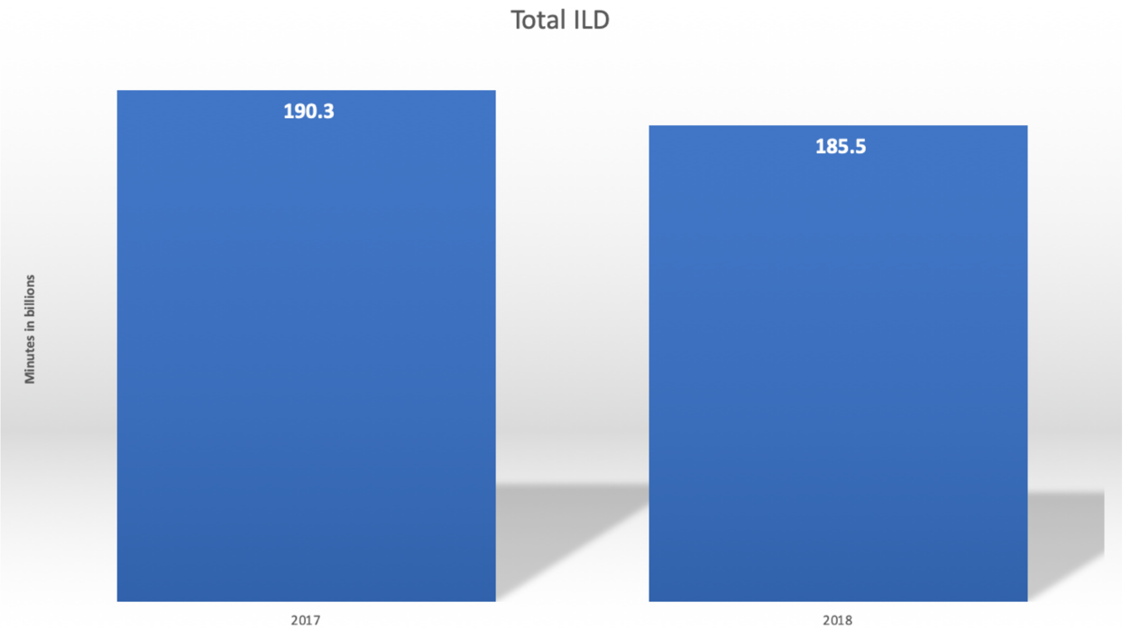
Definitions:

ILD Voice Minutes – Total annual international long distance voice minutes terminated (includes wholesale, retail & enterprise traffic, no domestic traffic)
End-to-End – Minutes received from a customer and sent to a supplier
VoIP – all flavors of voice over IP (public and private)
VoIPX – voice over IPX VLANs only (private, secure, CoS, SLA enabled)

Conditions:

End-to-End is a subset of Total ILD
VoIPX is a subset of VoIP

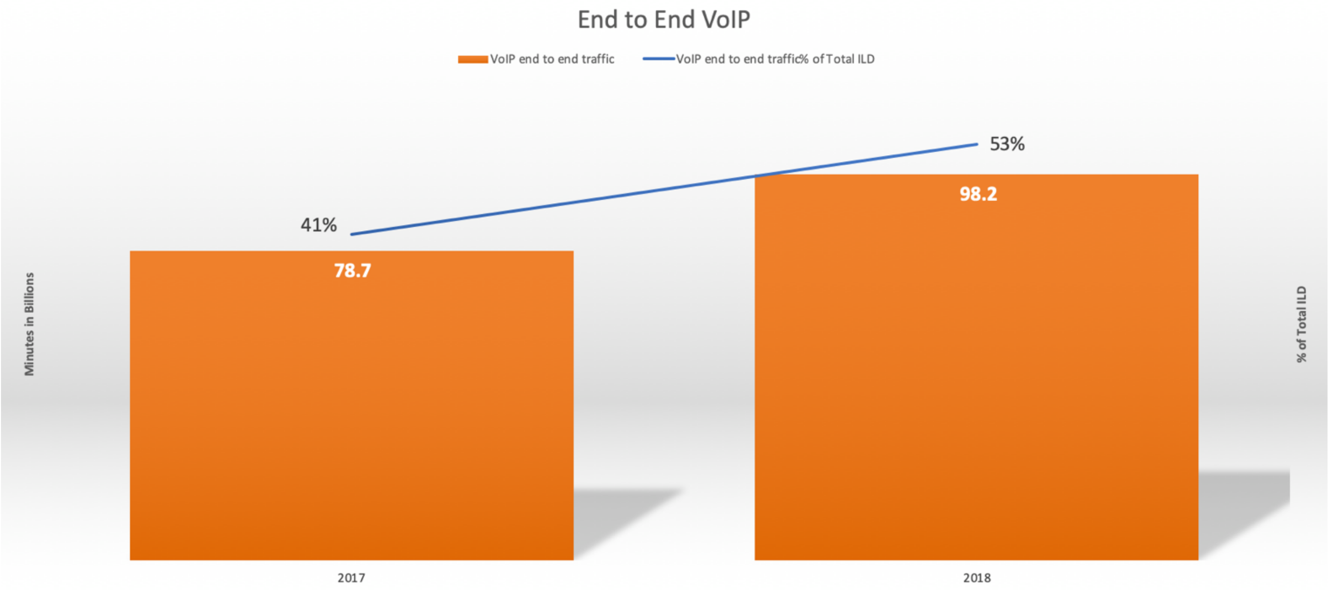
Results – Total ILD



Sample size = 188B minutes (average annual traffic volume)

Total ILD decreased -2.5% 2017 to 2018

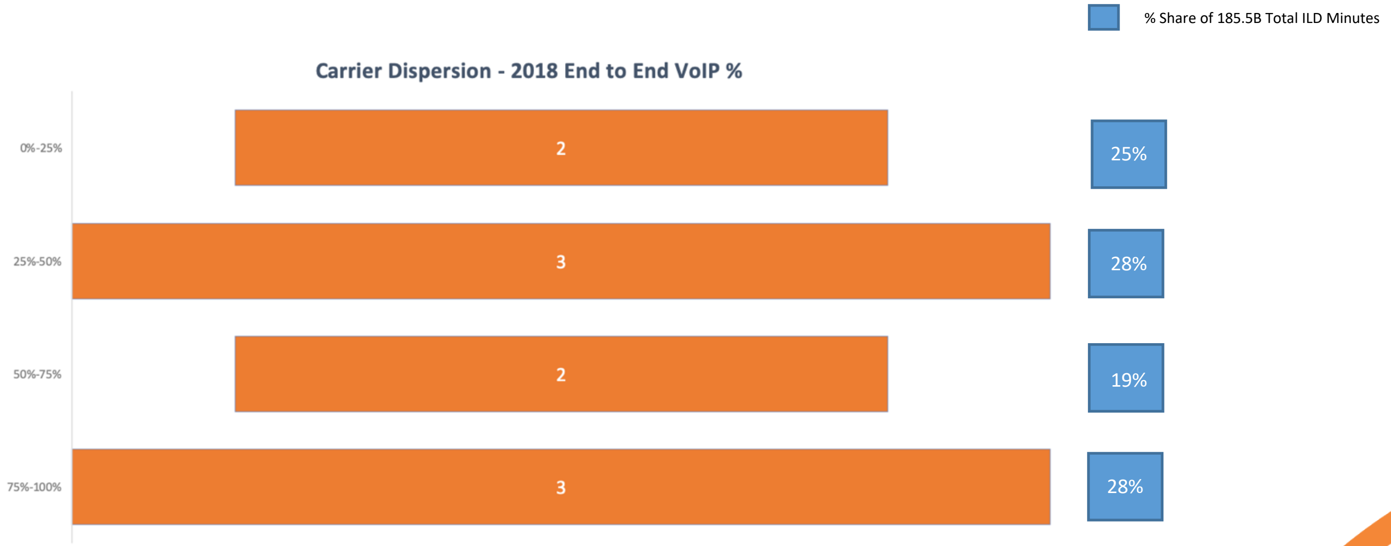
Results – End to End VoIP



End to End VoIP Traffic increased 25% 2017 to 2018

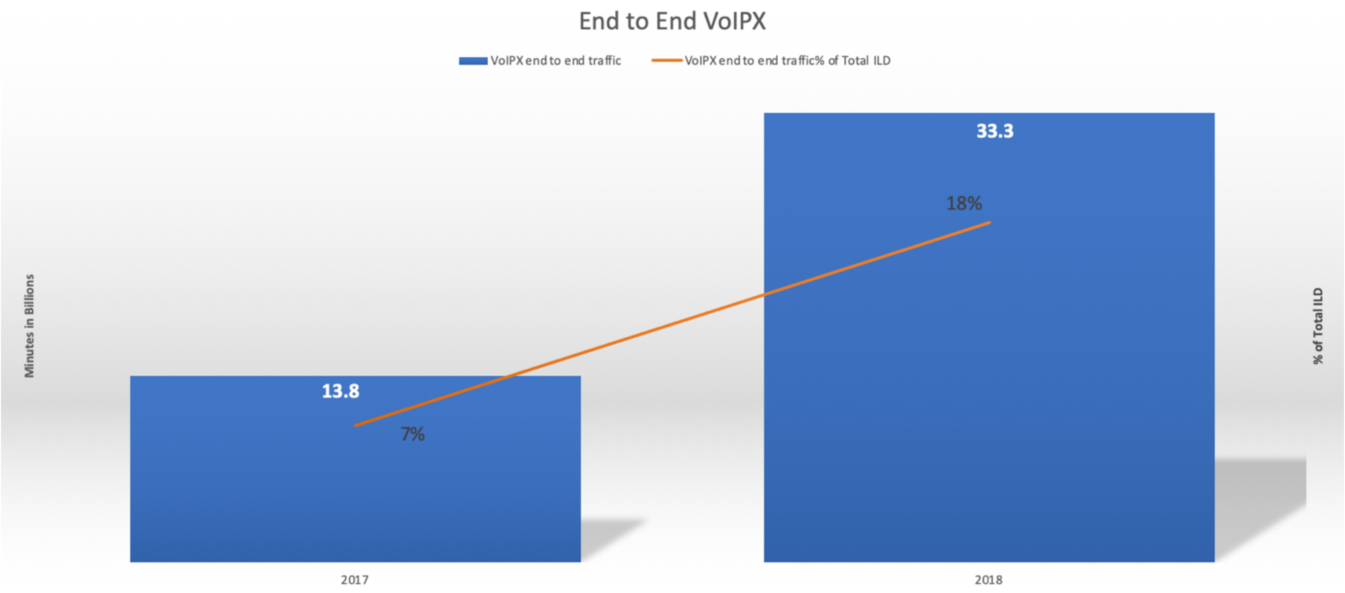
End to End VoIP% of Total ILD increased from 41% in 2017 to 53% 2018

Results – End to End VoIP



High level of dispersion
5 carriers reported 53% or higher
5 carriers reported below 53%
Many carriers contributing to 53% End to End VoIP%

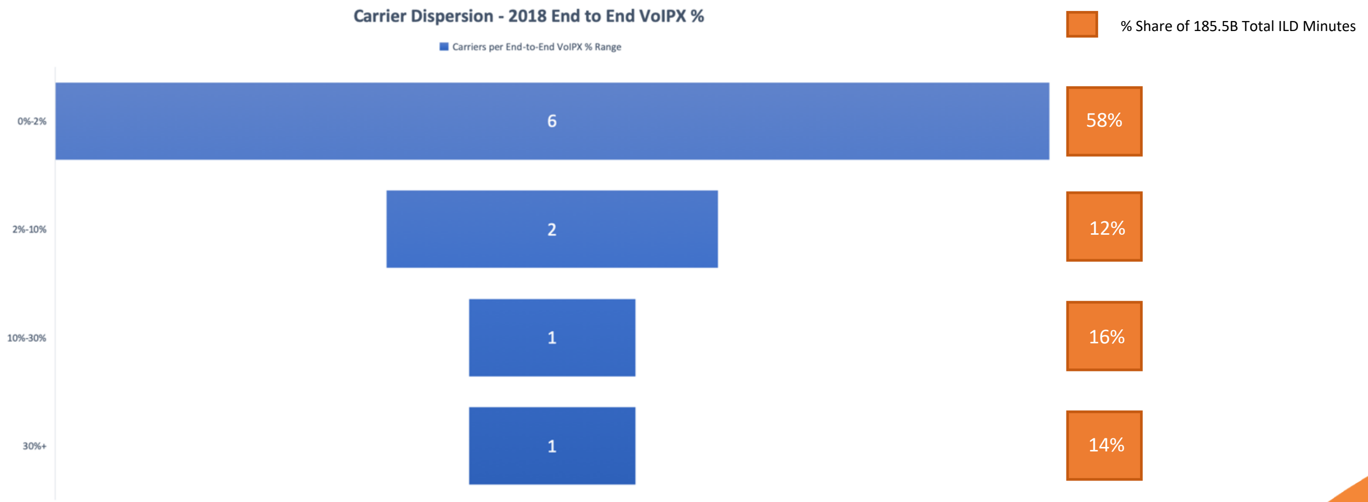
Results – End to End VoIPX



End to End VoIPX Traffic increased 142% 2017 to 2018

End to End VoIPX% of Total ILD increased from 7% in 2017 to 18% 2018

Results – End to End VoIPX



Low level of carrier dispersion
2 carriers reported 18% or higher
8 carriers reported below 18%
1 or 2 carriers contributing to 18% End to End VoIPX%

Highlights

End to End VoIP and VoIPX reporting strong growth rates year over year

53% of Total ILD in 2018 transported End-to-End VoIP (carrier network perspective)

142% growth in End to End VoIPX traffic

148% growth rate in End to End VoIPX%

	Traffic			Traffic %		
	2017	2018	GR	2017	2018	GR
End to End VoIP	78.7	98.2	25%	41%	53%	28%
End to End VoIPX	13.8	33.3	142%	7%	18%	148%

Many carriers contributing to high end to end VoIP%

53% in 2018 based on several carriers…. not just a few carriers impacting aggregate results

Low carrier contribution to end to end VoIPX%

18% in 2018 driven by two carriers

THANK YOU

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