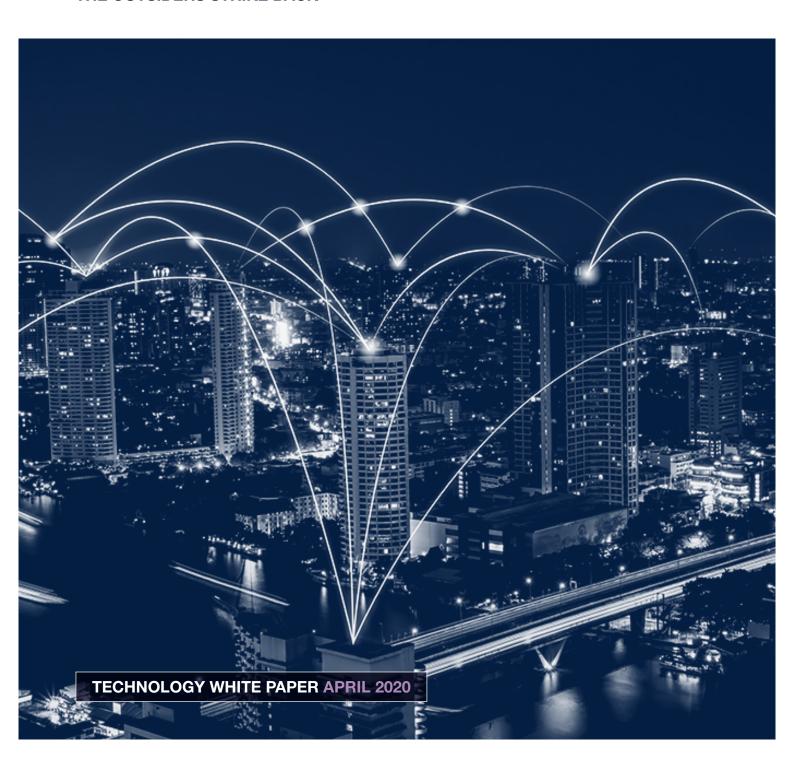
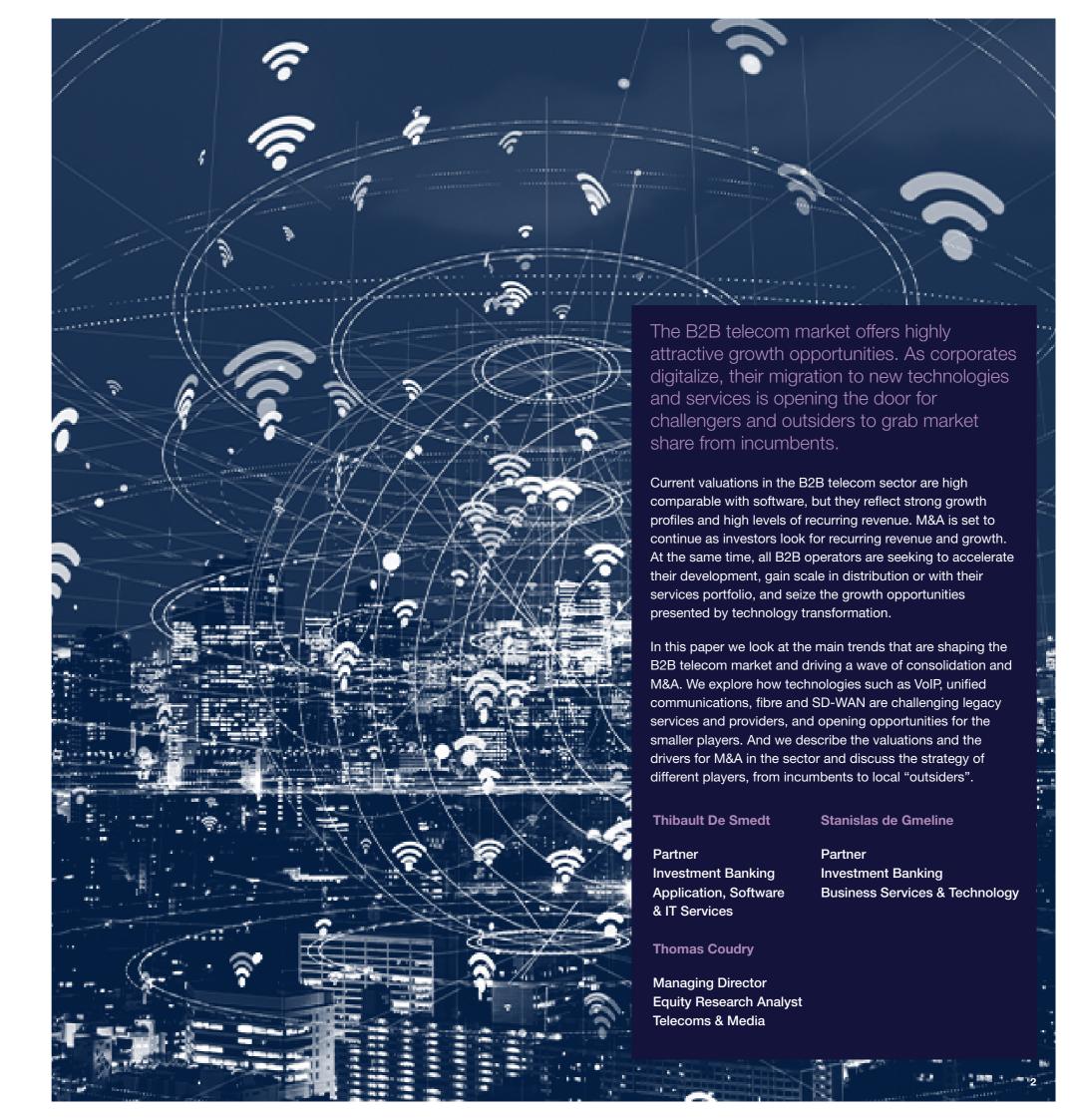


Game changers facing B2B telecom operators THE OUTSIDERS STRIKE BACK



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1. Telecom services are an essential piece in the digitalization of enterprises

The digital revolution

Enterprises are undergoing fundamental digital transformation, which is reshaping their information systems and the infrastructures on which they rely.

This goes far beyond the evolution of enterprise IT. All core business is at stake: supply chain, production, distribution and management control. Over time, the rise of the internet of things (IoT) will bring digital and connectivity to the heart of a business's assets and processes, generating additional data flows.

Telecom services are the foundation of this revolution. Networks and connectivity services provide the engine without which no advanced level of enterprise digitalization is possible. Fig.1 illustrates how today's business drivers are creating demand for different telecom services.



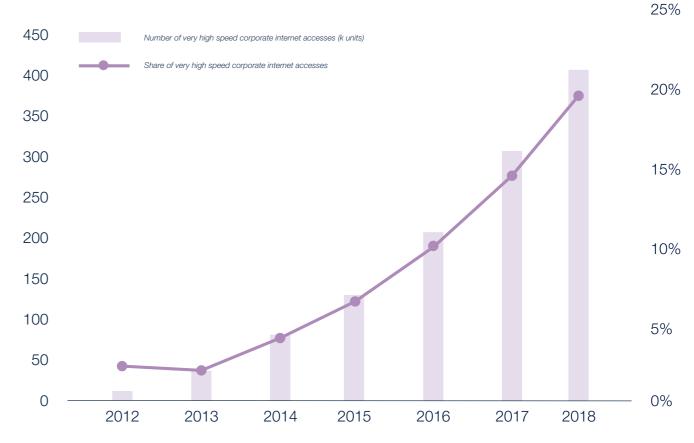


FIG.1: BUSINESS DRIVERS AND TELECOM SERVICES

Business drivers	Telecom services
Ubiquitous connectivity	Fixed/mobile convergence
Real-time access to information	Very high speed (fibre, 5G)
Increased data traffic capacity	Very high speed (fibre, 5G)
Cost efficiency	Cloud
Flexibility	Software-defined networks
Productivity	Unified communications
Data privacy	Network security

Source: Bryan, Garnier & Co Technology Research

FIG. 2: EVOLUTION OF VERY HIGH-SPEED INTERNET ACCESS IN FRANCE



Source: ARCEP, Observatoire des marchés des communications électroniques : <u>Le marché entreprise</u>, 17 décembre 2019

As Fig. 2 shows, the number of very high-speed corporate internet access points in France increased tenfold over the five years to 2018¹. As these connections only account for 20% of total corporate accesses, there is much potential ahead.

The development of B2B telecoms is driven directly by enterprise digitalization. This encompasses the whole range of services: infrastructure (datacenters, cloud, fibre), connectivity (voice, data, mobile, fixed) and value-added services (integration, data management, security).

¹ Full year figures for 2019; not yet available

2. B2B offers significant growth potential

B2B: the light in a depressed B2C world

Although 4G has been a major technological breakthrough, radically boosting mobile internet usage, it has failed to deliver financially for operators across Europe. Regulations that favour consumers and highly competitive national markets have prevented operators from getting a return on their heavy investments in the technology.

As a result, since 4G was launched, telecom stock indices have greatly underperformed the market (see Fig. 3). Revenue growth has been sluggish and restructuring efforts have not been able to offset the pressure from increased investment.

FIG. 3: STOXX EUROPE TELECOM 600 PERFORMANCE VS STOXX EUROPE 600





The outlook seems no brighter for 5G, despite its appealing technical features. The competitive landscape and public policies remain largely unchanged. Moreover, investments will still be significant, with radio equipment needed on both the mobile network and fixed sides to ensure very high-speed connectivity of base stations to the core networks.

However, "one size fits all" 5G networks – featuring low energy, ultra-low latency and handling thousands of simultaneous connections – could give a decisive boost to the development of IoT and open new opportunities in the B2B market.

Smart industries and smart cities, and

autonomous vehicles are examples of this potential.

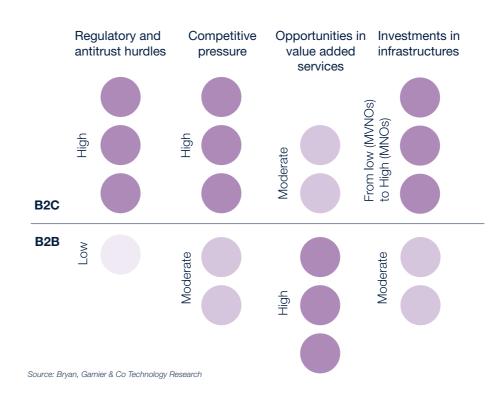
In addition, value-added services are dominated by GAFA in the B2C world, where incumbent telecom operators have been losing their grip on customers. Here, eSim and smart speakers could further disaggregate the customer relationship. And initiatives in content have not been successful, with most operators having walked away from the sirens of telco/media convergence.

B2B telecom operators, on the other hand, have been much more successful in avoiding the risk of commoditization, and are able to do

this without the heavy investments and fixed costs that the largest retail operators need.

Of course, pricing pressure on the B2C side has collateral effects on B2B, especially on the small enterprise segment, but the B2B world is seeing the rise of new services (details in the next chapter) that can be monetized better. In a depressed B2C landscape, B2B becomes a strategic segment where telecom operators can seize the growth opportunities, they have not been able to capture on the consumer side. See Fig. 4 for a B2B/B2C market comparison.

FIG. 4: TELECOMS B2C & B2B COMPARATIVE MARKET ENVIRONMENT ANALYSIS



The B2B telecom market has many catalysts

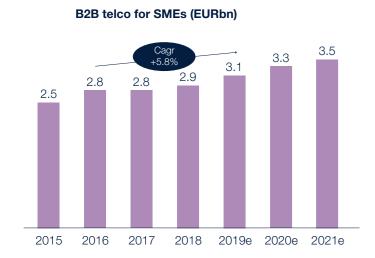
Driven by trends such as the increase in data usage, fixed/mobile convergence and cloud services, the fastest-growing segments in B2B telecoms are VoIP, unified communications, fibre access, cloud and IoT. Smaller B2B players with asset-light business models have a role to play here, seizing growth opportunities and stealing share from incumbents as corporates modernize their IT.

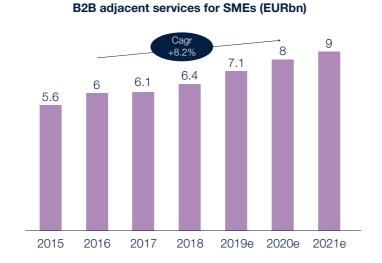
In Europe, the total B2B telecom market was estimated at EUR35.2bn in 2018².

²Bryan, Gamier & Co Technology Research



FIG. 5: TELECOMS B2C & B2B COMPARATIVE MARKET ENVIRONMENT ANALYSIS





Source: Bryan, Garnier & Co Technology Research

B2B telecom operators often also offer "adjacent services" beyond pure connectivity, for example cloud services, cybersecurity, IT integration and data management. The market for these services is experiencing strong growth, and the ability to provide value-added services on top of connectivity is valuable for two reasons. First, because the two are deeply interrelated: VoIP and unified communications require integration services, IP-based infrastructures increase the need for cybersecurity and the value of IoT connectivity is limited without efficient data management services. Second, sourcing policies can favour onestop-shops for operational and costeffectiveness reasons.

However, the business models for connectivity and adjacent services are very different and the transition from one to the other can be challenging. Some operators such as Orange and Deutsche Telekom (T-Systems) have been pushing hard in that direction, with differing degrees of success. Others, including Bouygues Telecom, prefer to enhance their connectivity offering and rely on partnerships for adjacent services.

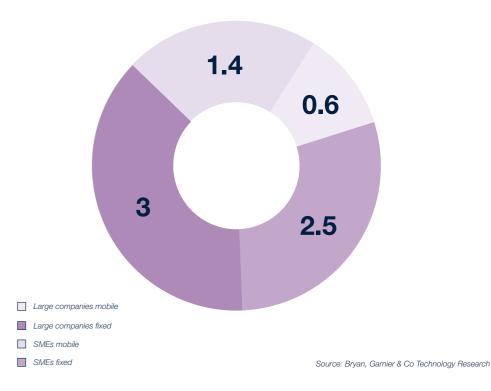
Among potential customers, SMEs present an attractive profile. They have been lagging behind in terms of digitalization because solutions offered by traditional operators have been expensive and inappropriate.

Fibre is a good illustration: in France, the fibre access market has long been split between expensive dedicated fibre for business (FTTO) and basic consumer FTTH (fibre to the home). The emergence of midprice fibre offers with business-level SLAs is taking time, but challengers Bouygues Telecom and SFR have now moved forward, helping to pull prices down and compensating for the disappointing impact of wholesale operator Kosc. Regulatory pressure in France is expected to help the market keep moving forward and challenge

incumbents further. The development of software-based telecom solutions such as SD-WAN (Software-Defined Wide Area Networks), which today mostly address large businesses with more than 10 sites, will become more accessible to smaller businesses over time.

SMEs in France account for more than 50% of the total B2B telecom market, with 45% fixed and 70% mobile: See Fig. 6 for this segmentation, and Fig. 5 for telco and adjacent services growth in France.

FIG. 6: SPLIT OF B2B MARKET IN FRANCE (EXCL. INDEPENDENT WORKERS)



SMEs are also an interesting target for B2B telecom operators from a financial perspective. With fewer custom offers and RFP processes than major accounts, operators have more pricing power.

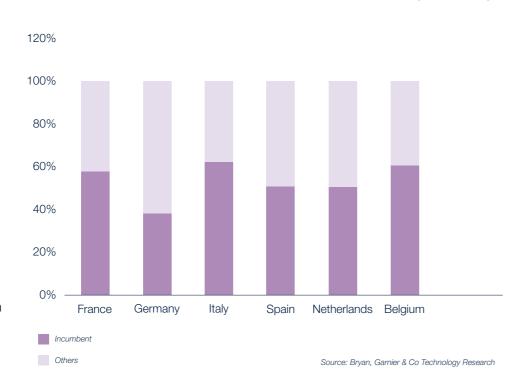
Challenges remain on the distribution side. Selling to small businesses requires either optimal direct distribution or a highly granular physical footprint, either owned or indirect. This explains the success of some players with indirect business models, such as Sewan or Alphalink in France. Other operators have built on historical local/regional presence to expand, such as Bretagne Telecom in Brittany and Jaguar Networks in the Marseille area, which is gaining scale following its acquisition by Iliad.

The door is open to take market share from

incumbent operators

The B2B telecom market is both fragmented and concentrated. It is shared between tens of different independent operators, yet a large chunk of the market is owned by a small number of major retail operators, with the incumbent often in a dominant position.

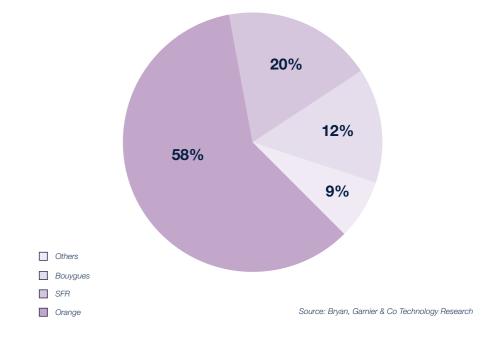
FIG. 7: MARKET SHARE OF INCUMBENTS IN EUROPEAN MARKETS (B2B TELCO)



In France, Orange is estimated to have almost 60% of the market, while together, the three largest players account for more than 90% (Fig. 8). The remainder is shared between tens of much smaller players.

Selling to small business remains a challenge for big telcos

FIG. 7: MARKET SHARE OF INCUMBENTS IN EUROPEAN MARKETS (B2B TELCO)







Incumbents are under pressure from challengers who are aggressively targeting greater market share, with two major drivers

- 1. Regulation. Market structure means regulation is much more accommodating for smaller players. In France, the regulator is trying to boost the emergence of alternative offers to Orange in the enterprise fibre market.market was estimated at EUR35.2bn in 2018.
- **2. Technology.** The replacement of legacy technologies such as PSTN, DSL/copper accesses, legacy messaging systems, onpremise IT infrastructures and M2M

communications is an opportunity for enterprises to change telecom providers. New technologies also change the game as telecom services are less dependent on major operators' infrastructure.

This is typically the case with fibre, over which incumbents have less control than over copper. In France today, 70% to 80% of accesses sold by B2B challengers are now fibre, but less than 20% of corporate access is on fibre, so there is great potential here.

There is similar potential with VoIP services, which do not rely on legacy PSTN or ISDN networks. More than 60% of enterprise fixed-line services in France still rely on PSTN.

And there will soon be a similar situation with the development of SD-WAN offerings, which are about to provide an alternative to MPLS private networks.

See Fig. 9 for an overview of technology changes.

FIG. 9: TECHNOLOGY MIGRATION CHANGING THE GAME

From legacy technologies and ... to an ecosystem promoting infrastructures controlled by development of new players incumbents... (VoIP, Fixed/Mobile convergence, PSTN/ISDN **Unified Communications**) Copper 5G, FWA (Fixed Wireless Access) SD-WAN **MLPS** Cloud, IAAS, PAAS On-premise infra. Data centers IoT (LoRA, Sigfox, NB-IoT, LTE-M, M2M (2G, 3G)



Source: Bryan, Garnier & Co Technology Research

SD-WAN makes it possible to deploy wide-area networks independently of access technologies and providers. As a result, it is making the migration from legacy MPLS network providers much smoother and cheaper. MPLS cannibalization risk is limited for smaller operators, but is expected to be much more significant for major players.

All operators are entering into SD-WAN partnerships. Bouygues Telecom is providing a solution based on Versa Networks, while Orange Business Services has recently announced a partnership with EKINOPS and Dell Technologies for a new universal customer premise equipment (uCPE) solution and the deployment of software-defined networking solutions. But B2B telcos could also see competition from SD-WAN pure players such as Sayse, which provide turnkey solutions with limited integration overheads.

Incumbents are trying to offset pressure on legacy connectivity services by developing adjacent services with greater market potential. For challengers, gaining market share from incumbents is difficult, because quality of service and

brand image are important choice factors for enterprises. Switching costs are high, so challengers must convince prospects they can deliver the appropriate quality of service at competitive prices in mission-critical environments.

Technology upgrades provide a good opportunity to do this. But to maximize market opportunities, challengers need to gain scale, enhance their distribution capabilities and reinforce investment capacities. M&A is a good way to achieve this.

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3. Valuations in B2B range halfway between software and standard telecom operators

The hype around M&A in the sector is driving high valuations

B2B telecom operators do not trade on the same multiples as the larger global operators involved in the consumer market. This is very visible in terms of EV/EBITDA (See Fig. 10), and there are several reasons behind it.

1. Most B2B operators are "asset light". Global integrated operators reach capex intensity of 15%-20% of sales, while pure B2B players usually stand between 5% and

- 10%. As a consequence, pure B2B players typically have less debt and a lower risk profile than their B2C counterparts.
- **2.** Pure B2B players' growth is often higher than other operators. Regression analysis shows that valuation multiples price in higher growth forecasts.
- **3.** The B2B market is perceived as less volatile than the B2C market, with long-term contracts (often more than 24 months) limiting promotional activity and generating greater recurring revenues.
- 4. The B2B market is less exposed to the "dumb pipe" risk, as the services layer is an important dimension of the offering. As the dependence of enterprises on their telecom infrastructure grows, enriched connectivity, for example quality of service and network security, becomes more important.
- **5.** The B2B market seems less exposed to regulatory uncertainty. In particular, B2B operators are mostly not directly impacted by frequency auctions or coverage obligations.

As a consequence, the valuation methodology for B2B operators is similar to the one used in the software sector. In particular, the notion of ARR, "Annual Recurring Revenue" is very much used in the valuation of B2B operators, but not in the B2C world.

On the flipside, asset-light operators are less prone to crystallize their infrastructure value. The many high- value infrastructure deals seen recently at major operators throughout Europe, for example involving Altice, Iliad, Vodafone and TIM, both on mobile towers and fibre,

are not applicable to most B2B pure players. Those with their own fibre or data centres can however hope to extract additional value here.

Eventually, valuation will be a combination of multiple criteria and thorough financial and operational analysis: see Fig. 11 for detail.

FIG. 11: MAIN VALUATION DRIVERS FOR B2B TELCOS

	Commitment rate
1 Customer base quality	Average churn rate and churn rate at the end of the commitment period
quanty	Cross-sell
	Pros vs. SMEs vs. large accounts
Customer value (ARPU / Upsell)	Average ARPU and evolution over time Renewal of contracts Subscriber acquisition cost (SAC) / customer Subscriber retention cost (SRC) / customer Customer lifetime value (LTV) / customer
Nature of the customer base Quality of distribution	Proprietary distribution Direct distribution Geographical distribution Bad debt rate
4 Financial KPIs	Embedded revenue / ARR vs. reported revenue Run-rate EBITDA vs. reported EBITDA
5 Quality of growth	New customers vs. upsell/cross-sell on existing customers Typology of new customers Typology of "churners"



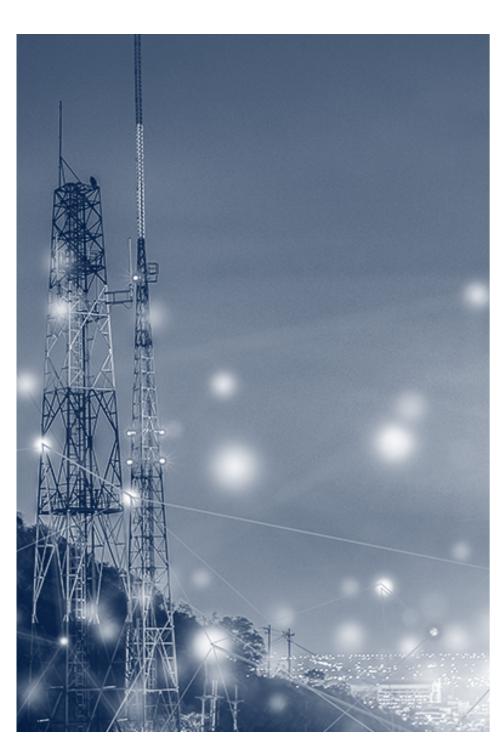
Source: Bryan, Garnier & Co Technology Research

FIG. 10: VALUATION OF B2B TELECOM OPERATORS

1	B2B telecom pure players	2020 EV/EBITDA			
	Average - trading peers (1)	13.2x			
	Average transactions	11.5x			
2	Integrated operators	2020 EV/EBITDA			
	Average - trading peers (1)	6.2x			
3	Software players 2020 EV/EB				
	Average - trading peers (1)	22.8x			

Source: Bryan, Garnier & Co Technology Research Note: (1) B2B Telecom pure players include Centurylink, Zayo Group, Cogent Communications and Gamma Communications, integrated operators include Orange, Altice, Iliad, Deutsche Telekom, Telefónica and BT Group and software players include SAP, Dassault Systèmes, Nemetschek, Compugroup Medical, Software AG and RIB Software

4. The market is set for further consolidation and buyouts



Mapping of players and motivations

In any given market, the B2B telecom landscape can usually be broken down into four categories:

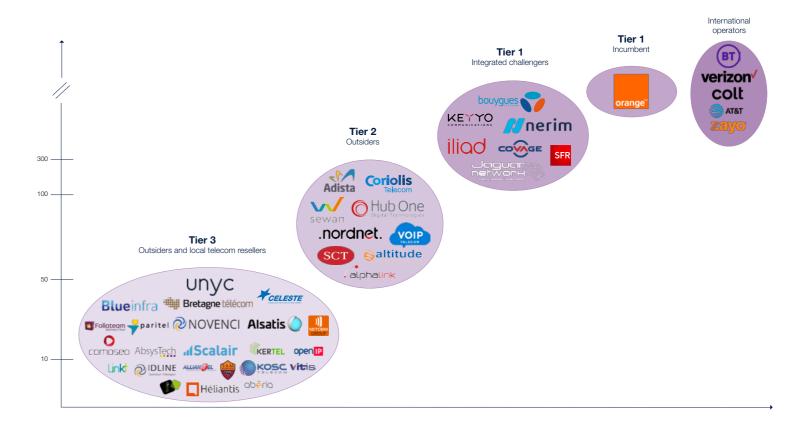
1. Incumbents

- 2. Challengers: other tier one integrated operators (usually MNOs) active in the B2C, B2B and wholesale markets
- **3. Outsiders:** tier two and three operators with national or local footprints, often pure B2B players
- **4. Foreigners:** large international players with local footprints that mostly address the needs of multinationals.

Players in adjacent markets such as cloud services, IT services and cybersecurity are an additional category.

See Fig. 12 and Fig. 13 for detail.

FIG. 12: FRENCH B2B TELECOM PLAYERS



Source: Bryan, Garnier & Co Technology Research

FIG. 13: FRENCH B2B TELECOM OUTSIDERS

	Revenue (in €m)			Market share (%)			
Company	2014	2018	CAGR 14-18%	2014	2018	14-18%	
Bretagne télécom	8	19	+25% 🖊 🖊	0.3%	0.6%	+0.3	
sewan	36	85	+24% 🖊 🖊	1.6%	3.5%	+1.9	
VOIP	n.d.	c.50	n.d.	n.d.	n.d.	n.d.	
alphalink	19	41	+21% 🖊 🖊	1.0%	1.8%	+0.8	
VOCELESTE Voyate plus 2000 avec to Mayor Cabbre	11	23	+21% 🖊 🖊	0.4%	0.8%	+0.4	
Jaguar netwonk	23	40	+15% 🖊 🖊	0.9%	1.4%	+0.4	
fransatel (MVNE)	26	30	+15% 🖊 🖊	n.d.	n.d.	n.d.	
Adista	55	93	+14% 🖊 🖊	2.2%	3.1%	+1.0	
openIP	7	12	+14% 🖊 🖊	0.4%	0.5%	+0.2%	
Zayo	28	44	+12% 🖊 🖊	1.1%	1.5%	+0.4	
STELLA	8	15	+12% 🖊 🖊	0.4%	0.5%	+0.1	
// nerim	28	37	+7%	1.1%	1.2%	+0.1	
C Hub One Digital Technologies	78	87	+3% →	3.1%	2.9%	-0.1	
COMMUNICATIONS	22	24	+3% →	0.9%	0.8%	0	
SISTEER8 (MVNE)	n.d.	9(1)	n.d.	n.d.	0.3%	n.d.	
DOCAPOSTE (MVNE)	n.d.	n.d.	n.d.	n.d.	n.d.	n.d.	
Total top 13 op.	349	559	+14% 🕕	13.4%	18.9%	+5.5%	

Source: Bryan, Garnier & Co Technology Research

M&As have recently been accelerating in the B2B market across all categories of players, with a number of drivers and objectives.

Incumbents are seeking to strengthen their position in adjacent markets to offset pressure on legacy services. Orange's strategy is instructive: over the past few years, the company successively acquired Lexsi, SecureData and SecureLink in cybersecurity, Basefarm in cloud services, as well as Business & Decision in data analytics. Orange's cybersecurity initiatives go beyond network security: the group is involved in IT security as a whole and has now become a top European player in the field.

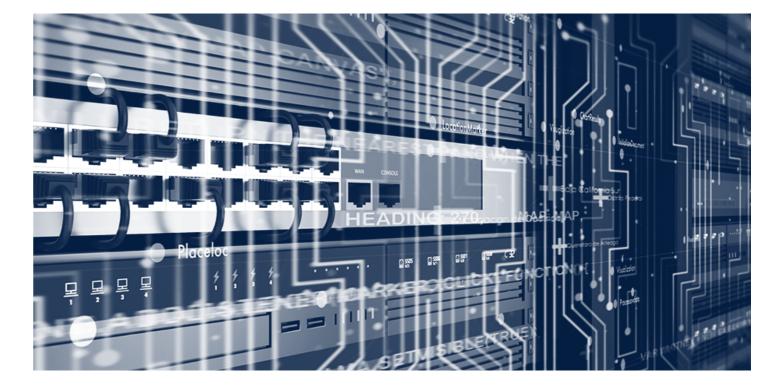
Challengers seek to develop their portfolio of services and distribution capabilities, find growth beyond the sluggish B2C market and steal market share from incumbents. The acquisition of Keyyo by Bouygues Telecom enables the group to build its distribution network to better address the SME segment, while the acquisition of Nerim enables it to strengthen its housing and cloud activities and develop cross-sell opportunities in fixed services. Iliad's acquisition of Jaguar Networks enables it to leverage its fixed infrastructure (fibre in particular) and combine it with Jaguar's housing assets, develop a B2B customer base and distribution capability, and open cross-sell opportunities in mobile services.

Outsiders seek to unite their forces or raise funds to accelerate their development, gain scale and better seize growth opportunities stemming from technology transformation.

Sellers, whether managers or funds, seek to seize high transactional valuations and the appetite for consolidation in the market, and monetize past investments in infrastructures, R&D or commercial build-up.

Financial investors on the buy-side are looking for recurring revenue and growth.

Fig. 14 summarizes recent deals.



1 Transactions with financial sponsors

Date	Company	CTRY	Acquiror	EV (€m)	EV/Revenue	EV/EBITDA	EV/EBITDA - Capex
Nov-19	Sewan	FR	Kartesia	133	1.18x	13.0x	15.8x
Nov-19	Destiny	BE	Apax	150	3.00x	12.3x	18.3x
Aug-19	KCOM Group	RU	Macquarie	829	2.51x	16.4x	n.a.
Jul-19	VOIP Telecom	FR	Groupe Chevrillon	100	2.00x	12.0x	n.a.
May-19	Manx Telecom	IM	Basalt Infastructure Partners	350	3.85x	11.5x	n.a.
Nov-18	Trustteam	BE	Ardian	78	3.79x	10.0x	n.a.
Jan-18	BSO Network Solutions	GB	ABRY Partners	n.a.	n.a.	n.a.	n.a.
Jul-16	Camusat International	FR	Equistone Partners Europe	n.a.	n.a.	n.a.	n.a.
Jun-16	ADISTA	FR	Equistone Partners Europe	105	1.44x	10.3x	19.7x
May-16	Destiny	BE	Mentha Capital	13	1.00x	6.2x	n.a.
Dec-14	Daisy Group	GB	Toscafund & Penta Capital	799	1.80x	10.9x	n.a.

Average	2.3x	11.4x	17.9x
Median	2.0x	11.5x	18.3x

2 Buy-outs by incumbents and challengers

Date	Company	CTRY	Acquiror	EV (€m)	EV/Revenue	EV/EBITDA	EV/EBITDA - Capex
Jan-19	Nerim	FR	Bouygues Telecom	55	1.62x	10.8x	n.a.
Jan-19	Jaguar Network (75%)	FR	Iliad	100	n.a.	10.6x	n.a.
Dec-18	Transatel	FR	NTT Communications	70	2.22x	n.a.	n.a.
Dec-18	Keyyo	FR	Bouygues Telecom	65	2.23x	13.6x	24.6x
			Average Median		2.0x 2.2x	11.7x 10.8x	24.6x

3 Consolidation withing B2B outsiders

Date	Company	CTRY	Acquiror	EV (€m)	EV/Revenue	EV/EBITDA	EV/EBITDA - Capex
Nov-18	Apps2com	FR	Foliateam	n.d.	n.d.	n.d.	n.d.
Jul-18	EDX Network	FR	Jaguar Network	n.d.	n.d.	n.d.	n.d.
Mar-18	Motto Communications	NL	Destiny	n.d.	n.d.	n.d.	n.d.
Dec-16	Universal Connect	FR	Sewan Communications	n.d.	n.d.	n.d.	n.d.
Dec-15	Completel	FR	Kosc Telecom	n.d.	n.d.	n.d.	n.d.
Jul-15	Iperlink	FR	Sewan Communications	n.d.	n.d.	n.d.	n.d.
	•	***************************************	A	:	:		. 24.0

Source: Bryan, Garnier & Co Technology Research

Significant synergies lie ahead

Apart from incumbents, which are in a defensive mood, the rationale behind most operations is definitely offensive. Revenue synergies are often the main objective, but strategic telecom B2B M&A can create many different operational and financial synergies: see Fig. 15.



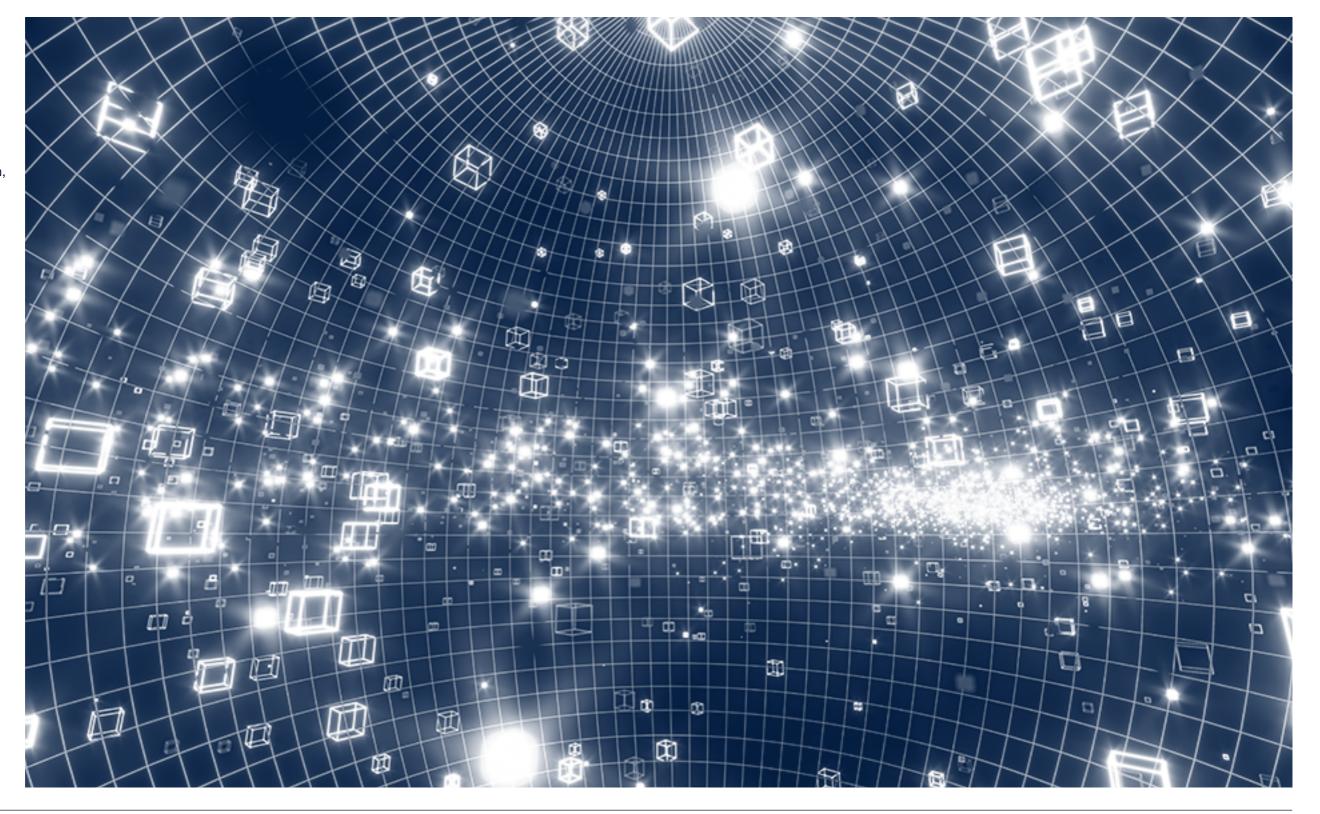
FIG. 15: SYNERGY OPPORTUNITIES IN B2B TELECOM CONSOLIDATION

	1	Products	Complement the product portfolio to offer a comprehensive range of services to generate greater loyalty and higher ARPU (e.g. fixed/mobile synergies, connectivity/adjacent services)
	2	Customers	Address a broad customer base through distribution network or target complementary customers
	3	Infrastructure	Remove redundant infrastructure (e.g. intra MNO consolidation) or third- party infrastructure (e.g. MNO buying out another operator's customer MVNO and transferring it within its own infrastructure). This will generate significant operational leverage since infrastructure is mainly a fixed cost. Same reasoning with R&D costs
Synergies	4	Vertical integration	Improve end-to-end control and efficiency of the value chain
	5	Strategic	Access to a growing market with new growth drivers to relieve the pressure from other business areas
	6	Tactical	Eliminate a competitor to reduce acquisition and retention costs, reduce churn, and even improve the ability to raise prices
	7	Costs and scale	Strengthen purchasing power and eliminate redundant support, marketing and sales costs
Others	8	Ability to pay and regulatory environment	Financial strength and compliance with regulatory constraints

Source: Bryan, Garnier & Co Technology Research

Conclusion

As corporates migrate to new technologies, the door is open for telecom B2B challengers and outsiders to grab market share from incumbents. To maximize opportunities, they will seek support from financial investors or strategic deals with peers. The B2B telecom market is set for further consolidation, and valuations should remain high, driven by recurring revenue, growth potential and synergies.





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Bryan, Garnier & Co leverage in-depth sector expertise to create fruitful and long lasting relationships between investors and European growth companies.









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Bryan, Garnier & Co is a European, full service growth-focused independent investment banking partnership founded in 1996. The firm provides equity research, sales and trading, private and public capital raising as well as M&A services to growth companies and their investors. It focuses on key growth sectors of the economy including Technology, Healthcare, Consumer and Business Services. Bryan, Garnier & Co is a fully registered broker dealer authorised and regulated by the FCA in Europe and the FINRA in the U.S. Bryan, Garnier & Co is headquartered in London, with additional offices in Paris, Munich, Zurich, Stockholm, Oslo and Reykjavik as well as New York and Palo Alto. The firm is a member of the London Stock Exchange.

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