

A VIBRANT MARKET

FOR M&A

Engineering and R&D Services Update



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The Engineering and R&D Services market has solid demand drivers in the current economic context. Despite the gradual deterioration in the economic environment, Engineering and R&D Services has experienced very strong growth since Q2 2021, at levels way above those prevailing before 2020. Listed European firms posted average Ifl revenue growth of 14% in Q2 2022 and 17% in Q3 2022 - while the trend was +7-8% over 2018-2019 and +5-7% over 2015-2017. Strong demand in all industries is driven by a series of structural changes pushing organisations to accelerate innovation: Industry 4.0, the will to reduce dependence on certain countries for certain supplies, implementation of sovereignty programmes, and the impact of environmental policies.

Net staff hiring still at record levels. Another sign of the good health of the Engineering and R&D Services industry at this stage of the crisis is reflected in the exceptionally high level of net staff hiring in 2021 and 2022, with a net peak reached in Q1 2022 for the industry while players like Alten and EDAG reached their peaks in Q3 2022 despite the historically high staff attrition rate (around 30%, vs. a normative 20-25%). We expect net staff hiring to return to pre-2019 levels as soon as 2023, although feedback from listed Engineering and R&D Services companies remains very positive on hiring intentions given the strong demand prevailing in many industries.

Attractive valuation levels unseen since 2019, 2016 and 2015. Since the peak in September 2021, valuations multiples in the Engineering and R&D Services market have fallen by 35%. This has driven the 12-month forward EV/EBITDA multiple to a very reasonable level of 10.0x, a valuation last seen in 2019 or 2015-2016. We have started to see Engineering and R&D Services stocks trading at 7-8x EV/EBIT multiples for 2023e. This is currently the case for EDAG. On the other hand, while some players have seen their valuations fall, they are still trading at high EV/EBIT multiples.

Vibrant market for M&A and private equity investment. The consolidation game is ongoing, as shown by the acquisitions of Semcon, Akka, GlobalLogic, Umlaut, PK, Altran, Pöyry and others. In addition, despite the decline in valuation multiples for listed companies, the number of M&A deals has not slowed. We flagged 48 M&A deals completed by Engineering and R&D Services firms in 2022, vs. 49 in 2021, and acquisition multiples still look reasonable. Finally, below independent leaders like Alten, SII and Assystem, and aside the multitude of privately-owned engineering firms, the French market is consolidating around PEbacked firms, which are building up through M&A: Expleo (Ardian), Scalian (Copeba), Smart 4 (Dzeta), Apside (Siparex), Vulcain (Equistone)...

The Engineering and R&D Services market has solid demand drivers in the current economic context

The Engineering and R&D Services market has faced no significant slowdown in demand so far despite the gradual deterioration in the economic environment in 2022. In our view, the strong demand which is still present in all industries is driven by a series of structural changes pushing organisations to accelerate innovation: Industry 4.0, the will to reduce dependence on certain countries for certain supplies (batteries, semiconductors, energy),

the implementation of sovereignty programmes by governments, and the impact of environmental policies on industrial firms (car electrification, hydrogen, reduction of fossil fuel consumption, circular economy, commitment to 'net zero', etc.). In view of this strong demand, all industries are expected to benefit from growth in engineering and R&D outsourcing services, as shown in Fig. 1. While the outsourcing rate in engineering and R&D is already strong and stable in

automotive and aerospace, it is rising in less mature industries such as life sciences and energy, explaining the above-average growth rates expected for both. For 2023, in the event of an economic shock such as those of 2008 or 2020, industries the most at risk are financial services and retail, but more in discretionary IT than in technical IT.

FIG. 1: CURRENT GROWTH DRIVERS IN ENGINEERING AND R&D SERVICES

	Expected growth	Growth drivers
Automotive	†	Car electrification, setup of giga-factories for batteries, investment in hydrogen, autonomous driving, life cycle assessment, offshore/nearshore work packages in order to offset pricing pressure
Aerospace	†	Many projects related to data, digital, PLM and manufacturing engineering, hydrogen airplanes, new satellites
Energy	1	Massive investments in nuclear, gas infrastructure (liquefaction, transport, storage) and renewables
Life Sciences	†	Digital health, R&D outsourcing in biotech, Industry 4.0, clinical trials, pharmacovigilance, regulatory filings
Financial Services	†	Investment in cloud, cybersecurity, open banking, process automation, fraud detection
Other service industries	1	Services and public administration, ongoing investment in marketing personalisation and user experience (need for Al and data analytics), cybersecurity and cloud
Defence and Security	†	European sovereignty programmes (FCAS combat aircraft, Eurodrone, European tank), increasing use of data, Al and cybersecurity
Shipbuilding	1	Vessel fleet modernisation, reduction of emissions for maritime freight, submarines
Rail	↑	Investments in rolling stock, infrastructure, signalisation and automation, work on hydrogen trains

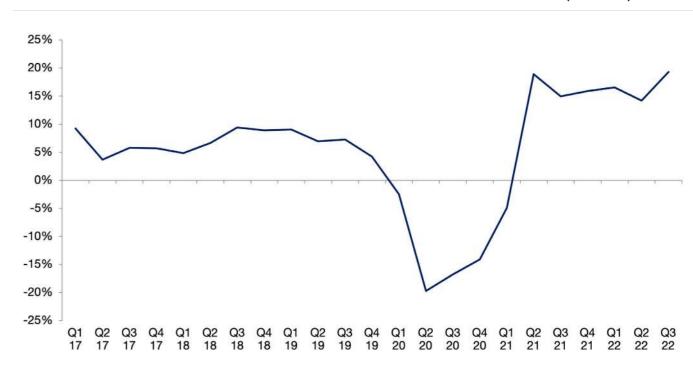
Source: Stifel*, based from Alten.

Engineering and R&D Services have experienced very strong growth since Q2 2021, with levels way ahead of those prevailing before 2020. Listed European firms posted average IfI revenue growth of 14% in Q2 2022, which was remarkable

given the already strong growth rate of 19% in the same quarter of 2021, **and** 17% in Q3 2022. Note that Engineering and R&D Services firms suffered more than IT Services firms from Covid lockdowns in Q2 2020 as a significant part of the product development and

manufacturing work in aerospace, automotive and defence could not been done outside the clients' premises, which were actually closed.

FIG. 2: QUARTERLY LFL REVENUE GROWTH - EUROPEAN ENGINEERING AND R&D SERVICES (2017-2022)



Source: Company Data (* Q3 2022 is provisional).

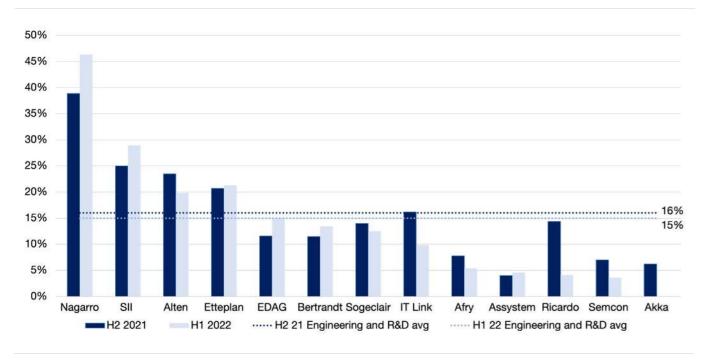


Fig. 3 shows the historically high levels of growth in Engineering and R&D Services. The top performers in H1 2022 were Nagarro (Germany) at

+46%, SII (France) at +29%, **Etteplan** (Finland) at +21%, and **Alten** (France) at +20%, while the underperformers were Ricardo (UK) at +4% and Afry

(Sweden) and Assystem (France) at +5%. Nagarro, SII, EDAG, Bertrandt and Etteplan even saw acceleration in H1 2022 compared to H2 2021.

FIG. 3: LFL REVENUE GROWTH IN HIGH-TECH SERVICES (H2 2021 - H1 2022)



Source: Company Data.

Not only is demand still solid, but the pricing environment remains healthy as well. For instance, 70% of Alten's customers have consented to price increases ranging from 1-2% to 5-6%. These rises are related to the increasing

scarcity of R&D resources and the ability to provide them. On the other hand, 30% of its customers – many of them in the automotive industry - have asked for lower prices. However, Engineering and R&D Services companies are used

to pricing pressure in automotive: many clients in this area have three-year pricing roadmaps implying pricing downward revisions, which have to be offset by productivity gains or more staff based in low-cost countries.

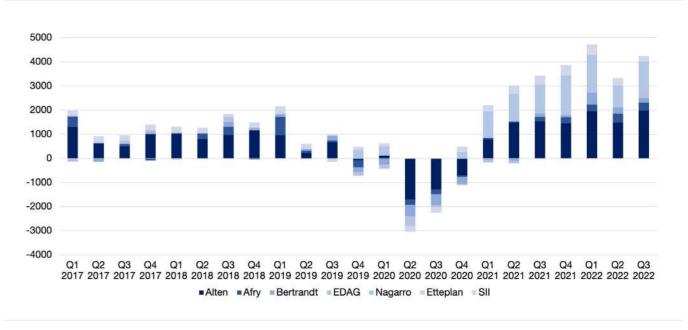
Net staff hiring still at record levels

Another sign of the good health of the Engineering and R&D Services industry at this stage of the crisis is reflected in the exceptionally high level of net staff hiring in 2021 and 2022 with net peaks of 1,980 for Alten in Q3 2022 and 1,630 for Nagarro in Q4 2021. Alten hired more than 1,400 staff per quarter over the past six quarters, whereas it hired between 230 and 1,300 per quarter between 2017 and 2019. Other listed Engineering and R&D Services firms

(SII, Bertrandt, EDAG, Afry) have also recorded net staff hiring above pre-2019 levels, but clearly significantly lower than at Alten and Nagarro. For SII, hiring peaked at an average 430 in Q4 2021 and Q1 2022 then slowed down to an average 220 in Q2 and Q3 2022. For Bertrandt, it peaked at 260 in Q2 2022. For EDAG it has peaked at 250 in Q3 2022. Finally, for Afry, it peaked at 360 in Q2 2022 then slowed to 330 in Q3. Despite the historically high staff attrition rate (around 30%,

vs. a normative 20-25%), net staff hiring is likely to remain sustained at least for Q4. We expect net staff hiring to return to pre-2019 levels as soon as 2023, although feedback from listed Engineering and R&D Services companies remains very positive on hiring intentions given the strong demand prevailing in many industries.

FIG. 4: QUARTERLY NET STAFF HIRING - ENGINEERING AND R&D SERVICES (2017-2022)



Source: Company Data; Stifel* ests.

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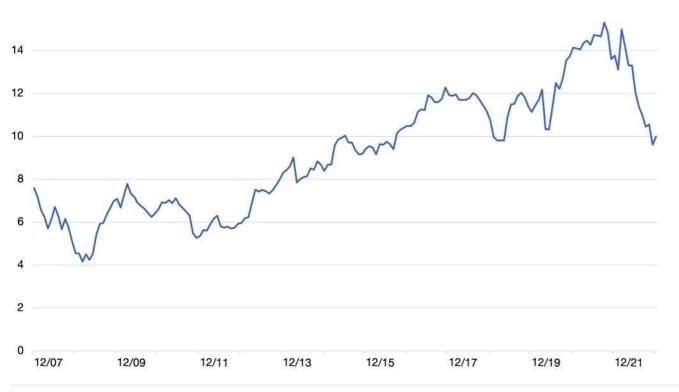
Attractive valuation levels unseen since 2019, 2016 and 2015

Fig. 5 below shows that, since the peak in September 2021, valuations multiples in the Engineering and

R&D Services market have fallen by 35%. This has driven the 12-month forward EV/EBITDA multiple to a

very reasonable level: 10.0x. This is a valuation seen last time in 2019 or 2015/16

FIG. 5: 12-MONTH FORWARD EV/EBITDA MULTIPLES IN ENGINEERING AND R&D SERVICES (2007-2022)



Source: Refinitiv.



More in details, we have started to see Engineering and R&D Services stocks trading at 7-8x EV/EBIT multiples for 2023e. This is currently

the case for EDAG (est. 7.5x). On the other hand, some players, if they have seen their valuation down, are still trading at high EV/EBIT multiples for

2023e (Assystem, Sweco, Etteplan,

FIG. 6: VALUATION MULTIPLES - ENGINEERING AND R&D SERVICES

Engineering & R&D Services	Currency Price farket cap			PER (x)			EV/sales (x)			EV/EBIT (x)		
	Ц	27-Jan-23	(m)	2021	2022e	2023e	2021	2022e	2023e	2021	2022e	2023e
Alten	EUR	138,6	4792	20,8	16,8	15,1	1,6	1,2	1,0	14,6	11,8	9,8
Afry	SEK	189,6	21 473	16,9	16,6	16,5	1,2	1,2	1,1	14,6	18,8	14,1
SII	EUR	48,5	970	38,8	15,8	13,4	1,4	1,0	0,9	26,9	10,6	9,2
Bertrandt	EUR	45,7	464	67,2	21,9	13,8	0,7	0,6	0,5	30,8	13,5	10,1
Ricardo	GBP/p	539,0	335	24,1	17,3	16,5	1,2	1,0	0,9	17,9	10,1	11,5
EDAG Engineering Group	EUR	10,7	259	NM	9,4	8,6	0,6	0,5	0,5	NM	8,6	7,5
Sogeclair	EUR	20,0	64	NM	41,6	16,9	0,6	0,5	0,4	NM	18,2	10,6
Average				33,5	19,9	14,4	1,0	0,9	0,8	20,9	13,1	10,4

Source: Refinitiv; Stifel* ests.

Globally, Engineering and R&D Services firms are suffering from lower valuation multiples than in March 2020, although they remain above those of 2011-2012, 2008-2009 and 2002-2003.

- The sector is still recovering on an operating margin standpoint (7.2% on average in 2021, +2.5ppt) from Covid lockdowns in 2020, during which automotive, defence and aerospace players shut down their premises and did not allow external engineers to work from home on many projects. It took almost one year for companies to absorb the bench of engineers. Only Alten, EDAG, Etteplan, IT Link, Nagarro, SII and Semcon reported for 2021 an operating margin above that of 2019.
- The operating margin in Engineering and R&D Services has been burdened during the last two decades by four

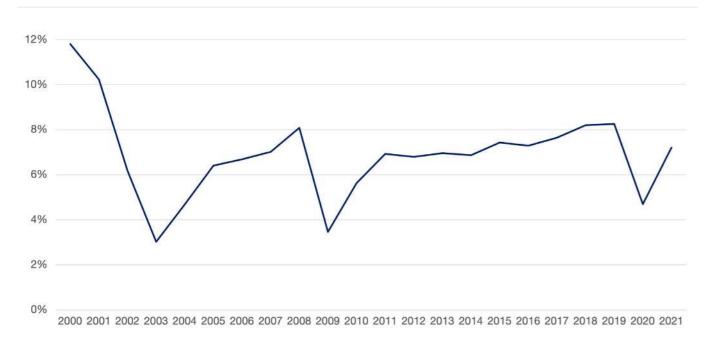
impactful events: 1) drastic cost control measures taken by chief purchasing officers on R&D and engineering services just after the dotcom bubble; 2) the substitution in France of the historical pure staffing model by work packages, with additional costs to be burdened by service companies; 3) In France, Airbus and automotive OEMs have significantly reduced their suppliers lists in engineering and R&D services; 4) strong margin pressure in Germany in automotive from 2013-2014 on staffing activities due to the enforcement of the AÜG law on temporary work - as staffing on a time and materials basis was assimilated to temporary work.

 Pricing pressure may be offset by relying on more staff based in lowcost countries, for instance India for semiconductors and software development, Romania and Morocco for automotive, Portugal for telecoms, and

even Ukraine for software engineering. This move offshore and nearshore, which was marginal ten years ago, tends to amplify under the impetus of global IT and consulting services players (Capgemini, Accenture, HCL, TCS, Wipro, Infosys). For instance, Alten employs 10% of its staff offshore, and ambitions to rise this ratio to 15-20% over the medium-term. In addition, geographic mix matters on operating margin: for specific reasons, Nordic countries, Italy, Benelux and the UK are clearly more profitable than France, Germany and Spain. As such, geographic expansion towards more profitable countries have a positive impact on profitability in Engineering and R&D Services.

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FIG. 7: AVERAGE OPERATING MARGIN FOR EUROPEAN ENGINEERING AND R&D SERVICES FIRMS (2000-2021)



Source: Company Data; Stifel* ests.



Vibrant market for M&A and private equity investment

The consolidation game is ongoing in Engineering and R&D Services, as recalled by the acquisition of Akka by Adecco (EUR2bn) in 2022, of GlobalLogic by Hitachi (USD9.6bn), Umlaut by Accenture (est. USD1bn) and PK by Concentrix (USD1.6bn) in 2021, of Altran by Capgemini (EUR5.2bn) in 2020, of Pöyry by ÅF to form Afry (EUR611m) in 2019, of Aricent by Altran (USD2bn), eInfochips by Arrow Electronics and Harman Connected Services by Samsung in 2018, and of Atkins by SNC-Lavalin (EUR495m) and Ausy by Randstad (EUR401m) in 2017. This wave of acquisitions has significantly increased the weight of global players (Capgemini, Accenture, Deloitte, Adecco, DXC Technology, NTT Data, Hitachi, Concentrix, Randstad, Sweco...) in the market, at the expense of independent players. Other major players in Engineering and R&D Services are Indian IT Services firms (HCL, Wipro, Cognizant, TCS, Infosys, Tech Mahindra) and global software

engineering players (EPAM Systems, Globant, Endava, Thoughtworks, Nagarro).

Apart from these recent large M&A deals, the **independent competitive environment** in this market is as follows:

- Many independent players are publicly listed: Alten, SII, Assystem, Sogeclair and IT Link (Paris), Sweco and Afry (Stockholm), Nagarro, Bertrandt and EDAG (Frankfurt), L&T Technology Services, Persistent, KPIT Technologies and Cyient (India), Ricardo (UK), Etteplan (Helsinki), Goodtech (Denmark).
- Six major players are owned by private equity firms: Expleo (acquired at 60% by Ardian in 2017 from Assystem for an EV of EUR590m), Scalian (acquired by Cobepa in 2018), Quest Global (Bain Capital, Advent, GIC, ChrysCapital, True North), Semcon (acquired by Ratos in 2022)

- for SEK2.8bn), Belcan (acquired by AE Industrial Partners in 2015), and CDI (acquired by AE Industrial Partners in 2017).
- Privately-owned independent players are AVL, IAV, Segula, Ferchau, MoOngy, Astek, Extia, MCA, LGM Group, Quest Global...
- The French market is consolidating around PE-backed firms. Many companies are building up through acquisitions: Expleo (five deals since 2017), Scalian (five deals since 2020), Smart 4 (Dzeta, 11 deals since 2019), Apside (Siparex since 2017, three deals in 2019), Vulcain Engineering (Equistone since 2019, nine deals), Serma (Ardian, BPIFrance, Chequers Capital, five deals since 2018)... Four of them have reached the EUR200m revenue threshold in 2021 (Expleo, Scalian, Smart 4, Apside).



FIG. 8: COMPETITIVE LANDSCAPE IN ENGINEERING AND R&D SERVICES



Source: Pareekh Consulting; Stifel* ests.



Despite the decline in valuation multiples for listed Engineering and R&D Services companies, the number of M&A deals has not slowed since early 2022. We flagged 48 M&A deals completed by Engineering and R&D Services firms in 2022, vs. 49 in 2021. Acquisition multiples still look reasonable:

- Ratos acquired Semcon (Sweden, 2,100 staff) in November for SEK2,840m or 1.7x sales and 16x EBIT.
- Ricardo acquired AEA Technology assets (UK, environmental consulting) in November for GBP18m or 0.5x sales.
- We estimate **Alten acquired Volansys** (USA, 480 staff) **and Methods** (UK, 710 staff) in July for respectively 1.0x sales (est. EUR11-12m) and 0.4x sales (est. EUR46m).
- Bertrandt acquired Philotech (Germany, 350 staff) in January for EUR24m or est. 0.7x sales
- Expleo acquired Assystem Care in France, Belgium and Switzerland (418 staff) in January for EUR28m or 0.7x sales.

Other more significant acquisitions signed in 2022 were the following:

- The Belgian staffing firm **House of HR** acquired **ABMI** (750 staff and EUR50m revenues) in December. House of HR is backed by Bain Capital.
- Hitachi (through its GlobalLogic subsidiary) acquired Fortech (Romania, 1,100 staff) in December.
- Scalian acquired HR Team (France,

EUR95m revenues, 850 staff) in for USD9.6bn or an EV/sales multiple September. of 8.0x and an EV/EBITDA multiple of

- Cyient acquired Citec (Finland, 1,200 staff) in August.
- Ferchau Engineering acquired M Plan (Germany, EUR55m revenues, 600 staff) in January.

In pure Engineering and R&D Services, Accenture was less active in acquisitions in 2022 (1 deal) than in 2021 (2 deals, vs. 3 in 2020 and 6 in 2019). This was the same for Alten (1 in 2022 vs. 3 in 2021, 3 in 2020 and 7 in 2019). However, Alten was also more active in M&A in digital transformation (4 deals in 2022 vs. 2 in 2021, 1 in 2020 and 2 in 2019) and has also engaged the disposal of its Cprime business (agile training and consulting, EUR147m revenues). Other companies active in M&A last year include Etteplan (3 small acquisitions in engineering and R&D and 1 in sustainability in 2022), Nagarro (1 acquisition in digital agencies and 1 in solutions for financial services), Afry (2 acquisitions in engineering and R&D, 1 in cybersecurity, 1 in consulting), Ricardo (2 acquisitions in environmental consulting), and SII (1 pending acquisition in digital transformation).

In addition, regarding market consolidation, Adecco acquired Akka in March for EUR1,975m, or EV/sales and EV/EBIT multiples of 1.2x and 20x for 2021, in order to merge it with Modis, Adecco's high-tech engineering consulting business, and then generate EUR4bn revenues in that domain. In 2021, the most important acquisitions were that of GlobalLogic by Hitachi (21,000 staff, software engineering)

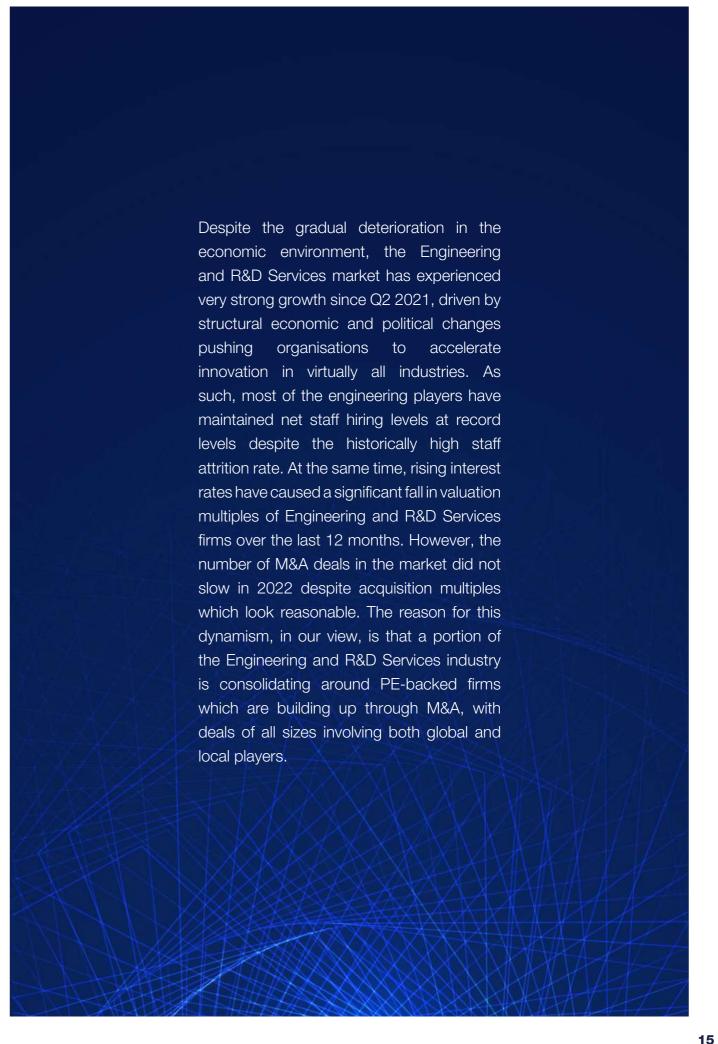
of 8.0x and an EV/EBITDA multiple of 37x, that of PK by Concentrix (5,000 staff, customer experience design and engineering) for USD1.6bn or an EV/sales multiple of 3.0x and an EV/EBITDA multiple of 19x, and that of Umlaut by Accenture (4,200 staff) for est. USD1bn or an est. EV/sales multiple of 2.1x.

Finally, private equity funds have remained active in acquiring Engineering and R&D Services firms. Indeed, in November 2022, Ratos acquired Semcon for SEK2,840m or est. 1.7x EV/sales and est. 16x EV/EBIT multiples. In addition, in December 2022, Everstone Capital and Goldman Sachs acquired Cprime from Alten for an undisclosed sum.

FIG. 9: M&A TRANSACTIONS IN ENGINEERING AND R&D SERVICES (Q3 2022 AND BEYOND)

Name of Control			d transactions		0.75	C-1				
Date	Acquirer	Target	Country	Currency		Revenues (m) EBI		EV/sales		
Dec-22	Everstone Capital / Goldman Sachs	Cprime (Alten)	USA	EUR	n/d	147	11%	200		550
Nov-22	Ratos	Semcon	Sweden	SEK	2840	1711	10%	1.7x	16x	2112
		Enginee	ring and R&D							
Date	Acquirer	Target	Country	Currency	Price (m)	Revenues (m) EBI	T margin (%)	EV/sales	EV/EBIT	Headcoun
Q2 2023	Alten	(not disclosed)	USA	EUR	n/d	14	1.5	-3	-	65
Q2 2023	Alten	(not disclosed)	India	EUR	n/d	10	-	-	-	295
Q1 2023	Alten	(not disclosed)	Germany	EUR	n/d	20	1870	5:	- 5	190
Q1 2023	(not disclosed)	MPH Global Services	France	EUR	n/d	30	0%	-		1200
Nov-22	House of HR	ABMI	France	EUR	n/d	50		- 8	- 2	750
Aug-22	Astek	Conmore	Sweden	EUR	n/d	13	120	23	S .	150
Aug-22	Cylent	Citec	Finland	EUR	n/d	-	-	2	<u></u>	1200
Jul-22	Afry	Ionic Consulting	Ireland	SEK	n/d	57	32	23	2	42
Jul-22	Vulcain Engineering	Efinor Bretagne + Efinor Méditerranée	France	EUR	n/d	20	-	23	2	100
Jul-22	Cylent	Celfinet	Portugal	EUR	41	-	-	2)	2	-
Jul-22	Alten	Volansys	USA	EUR	11,5	12	15%	1.0x	6x	480
Date		Target	ransformation	Currency	Drive (m)	Revenues (m) EBI		FWeeles	EV/EBIT	Headcour
Jan-23	Acquirer SII	Metanext	France	EUR	n/d	18	margin (%)	EV/Sales	EV/EBII	160
Sep-22	Scalian	HR Team	France	EUR	n/d	95	3.0			850
Sep-22	Expleo Group	SQS Portugal	Portugal	EUR	n/d	95		-		50
	Smart 4 Engineering		Italy	EUR	n/d			50		140
Aug-22 Jul-22	Alten	Eurosystem Methods Group	United Kingdom		46	110	6%	0.4x	7x	710
our LL	Atten	monous aroup	Office Hingdom	LUIT	,,,,	110	070	UIIA	- 10	110
		Approximate the second	e Engineering							
Date	Acquirer	Target	Country	Currency		Revenues (m) EBI		EV/sales	EV/EBIT	
Q2 2023	Alten	Qualitance QBS	Romania	EUR	n/d	13	3%			300
Dec-22	Hitachi	Fortech	Romania	EUR	n/d	40	-	23	2	1100
Nov-22	Alten	AFour Technologies	India	EUR	n/d	-	-	2	9	400
		Dat	a Science							
Date	Acquirer	Target	Country	Currency	Price (m)	Revenues (m) EBI	margin (%)	FV/sales	FV/FRIT	Headcour
Sep-22	Astek	IT&M Group	France	EUR	n/d	24	-	-	-	280
34		W								
Date	Acquirer	Co Target	Country	Currency	Dring (m)	Revenues (m) EBI	T morain (9/1)	EV/solos	EV/EDIT	Headcour
Sep-22	Belcan	RTM Consulting	USA	USD	n/d	nevenues (III) EDI	margin (70)	EV/Sales	EV/EDI1	neaucour
Jul-22	Expleo Group	UMS Consulting	Germany	EUR	n/d	a .	170 180	-		60
Security States	andana sa anda	one oncoming		2011	10.0		1000			
Date	Acquirer	Target	Country	Currency	Price (m)	Revenues (m) EBI	T margin (%)	FV/sales	EV/EBIT	Headcou
Nov-22	Ricardo	AEA Technology assets	United Kingdom	GBP	18	39	8%	0.5x	6x	n/d

Source: Company Data; Stifel* ests.





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