Gedik investment

Akdeniz Guvenlik

A Unique Transformation Play

15 November 2017

Turkey's leading security firm is looking to diversify its business: Akdeniz is one of Turkey's largest manned security providers with a backlog size of TL657m. The business has grown successfully with a top-line CAGR of 32% between 2011 and 2016, but due to the substantial amount of new entrants (c.1,500), the EBITDA margin has been eroding and dropped by 400bps in the last five years. Apart from streamlining the maturing, existing business, the management decided to diversify and expand in higher-margin areas, and announced talks to buy stakes in a system solutions firm (Tanitek) and a specialty defense vehicle producer (Mai).

Entering new businesses: The potential cost of these ventures has not been released, but from what we understand it will be around TL20m for 50% stake. Tanitek is a local software firm that already provides solutions for specialized state and local authority projects, with systems such as license plate recognition software and management, vehicle and human tracing, biometric control, and mobile face recognition. Mai is a flagship special-purpose vehicle producer with international know-how and low overhead costs.

Expecting consolidated net income to grow by 120% in 2018, followed by a 25% p.a increase within 2018-2020: Management plans to consolidate both businesses proportionally. Tanitek has provided the core software for the police and security force and expects much stronger revenue generation in tracing and hardware businesses (c-30-60% guided net margins) over the coming years. Mai has imminent business generation opportunity in a USD400m market to be distributed among 45 players, along with being a subcontractor for firms that seem to have overbooked their capacities.

Target price: TL10.2/share, a 79.3% upside, trading at low multiples: Our DCF-based upside is conservative, in our view, as we assume lower-than-guided margins. Assuming the partnerships will materialize, the stock trades on quite low multiples while our implied fair value multiples are barely at double digits. Sectoral comparables tend to trade in the mid-teens. We also believe the business model is not WIC intensive as most state orders include an up-front payment providing for most of this need. Hence, the future dividend flow could also be strong. We believe, the theme provides a unique opportunity with lots of catalysts lined along the way.

TL mn	2016	2017E	2018E	2019E	2020E
Revenues	467	374	493	587	676
EBITDA	16	9	27	34	41
Net Income	9	9	20	25	31
Gross Margin	4.2%	4.0%	8.1%	9.9%	10.1%
EBITDA margin	3.5%	2.5%	5.4%	5.7%	6.1%
Net Income Margin	1.9%	2.5%	4.1%	4.3%	4.6%
P/E (x)	10.8	18.6	8.5	6.8	5.7
EV/EBITDA (x)	6.4	19.6	7.0	5.7	4.8
EV/Sales (x)	0.2	0.5	0.4	0.3	0.3

BUY

Coverage Kickoff

Stock Data	
Sector	Security Services
Bloomberg / Reuters code	AKGUV.TI / AKGUV.IS
Price (TL/share)	5.69
Target Price (12M, TL/share)	10.20
Potential Return	79%
52-week range (TL/share)	2.26-5.78
Market Cap (TLmn)	176
Enterprise Value (TLmn)	189
Floating Market Cap (TLmn)	54
Avg volume (3-mnth, TLmn)	2.48
Shares out (mn)	31
Effective Free Float	31%
Foreign ownership (% of free float)	
Current	23%
3 month ago	16%

Volume - Period	1W	1M	3M	12M
Avg-Number of Shares traded (000)	420	449	465	471
Avg-Volume (000TL)	2,360	2,451	2,484	1,748
Price range (TL/share)	5.51-5.78	5.05-5.78	4.39-5.78	2.26-5.78

Performance	1M	3M	6M	12M
Absolute	7%	21%	104%	133%
Relative to BIST100	3%	17%	76%	59%

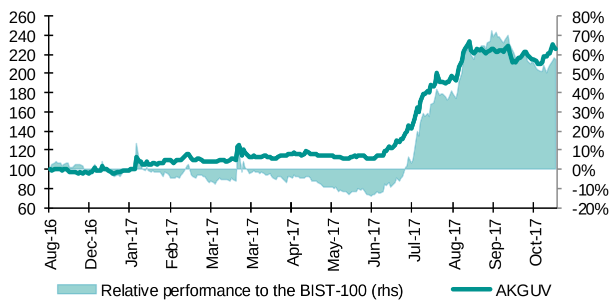
Shareholder Structure	
Akdeniz Girişim Holding A.Ş.	62%
Necmeddin Şimşek	7%
Free float	31%

Company Description

Akdeniz Security is Turkey's leading security services firm with intentions to diversify its business into defence, and security software and security mobile solutions.

EXHIBIT: Price Performance

SOURCE: Gedik Investment



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We're initiating coverage with a target price of TL10.2/share, 79.3% upside. We believe the strategy shift in order to diversify away from the matured security business is providing a unique transformation and investment opportunity for investors. As we will discuss within this report, the company is on the verge of forming some unique partnerships (discussions have formally begun), and with that potential EBITDA could rise 120% in 2018 and 25% p.a. until 2020. We also believe our estimates are conservative given the volume and margin potential of the businesses (see valuation on pages 8-10).

Turkey's leading security services provider enjoys strong management. Akdeniz Guvenlik (Security Services - http://english.akdenizguvenlik.com.tr/) was initially formed back in 1992 as a cleaning contactor, and entered into the physical security business (guarding) in 2004 after the government passed a decree approving all private security services and related functions, such as education and training. Since then, Akdeniz has become one of the leading players in Turkey with a backlog of TL657m, and according to 2014 data (sectoral data was released once in 2014 and is held confidential by the Interior Ministry and Turkish Police Directorate) is Turkey's third-largest security firm. The company also offers alarm and monitoring services. Today, Akdeniz serves 35 cities and over 200 clients and employs 8,262 personnel, while the parent also operates a training and education center. The company is a steady dividend payer as it pays out 50% of its profits and is included in the BIST dividend index. We believe that the company has an excellent management team that is capable of working with and acquiring a variety of clients, is proactive, as well as profit and value driven. Also, the company has strong know-how in dealing with government-related businesses, which is likely to complement the new strategy. The business has TL12.7m of net debt.

EXHIBIT 1: Top Turkish Securities Firm Rankings (2014)

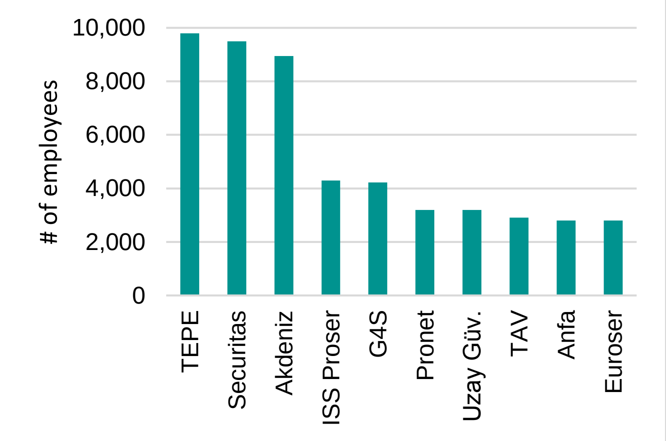
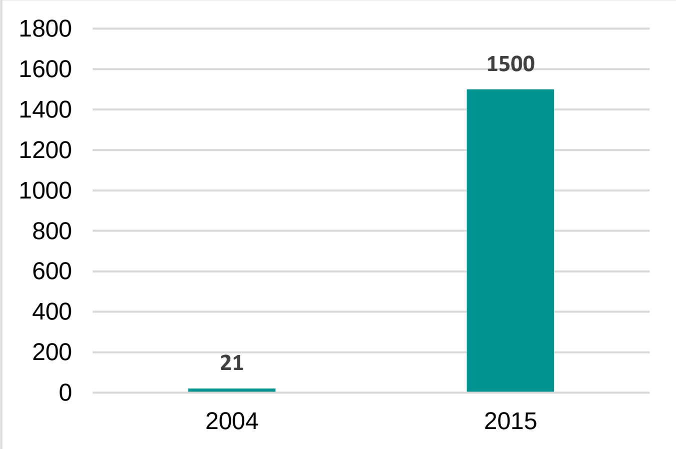


EXHIBIT 2: Turkish Securities Sector: Number of Players



Source: Turkish Chamber of Commerce

EXHIBIT 3: Akdeniz Guvenlik: Backlog (2014-2020E)

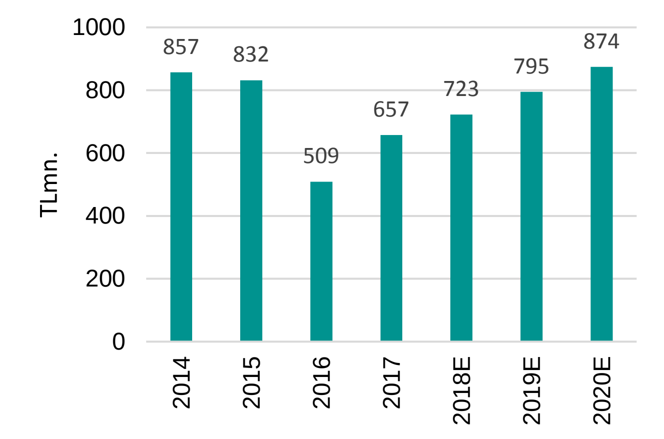
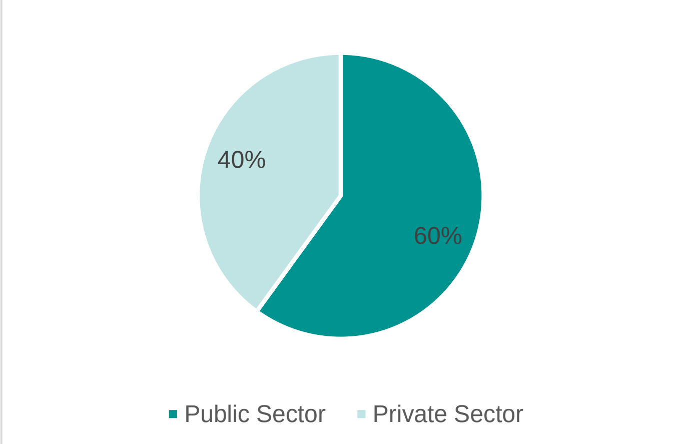


EXHIBIT 4 Akdeniz Guvenlik: Breakdown of Segments Served

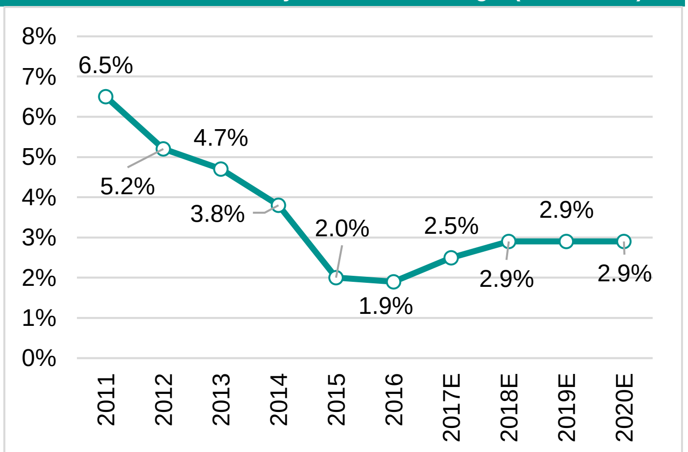


Source: Company Data, Gedik Estimates

The core business has become too competitive and the company is looking to expand and integrate into new and more profitable business lines. As presented in Exhibit 2, the number of players in the sector has exploded over recent years. The top players pride themselves on the service they provide—and their service is superior to generic firms—with items such as employing the most qualified personnel (Akdeniz pays between TL2,500 and 4,000/month per security officer, while the Turkish minimum wage is TL1,404/month), having the know-how in detecting, reporting, and solving structural and tactical security flows of businesses and buildings, and continuous on-the-job inspections of personnel. That said, it appears that the Turkish clientele is still not equipped to pay these premiums. As a result, the company's EBITDA margin has been eroding since 2011, dropping by 400bps since then. The company has made sure to let unprofitable contracts go and is not taking on any unfeasible contracts. Hence, average annual revenue growth, at 30% between 2011 and 2016, is likely to settle at a new normal of CPI+100/200bps and EBITDA margins should be stable.

EXHIBIT 5: Akdeniz: Security Business Revenues (2011-2020E)

EXHIBIT 6: Akdeniz: Security Bus. EBITDA Margin (2011-2020E)



Source: The Company, Gedik Estimates

Akdeniz's new strategy is to expand in new businesses with higher added value. We believe the philosophy of the management of Akdeniz is quite similar to how older and traditional global security firms have evolved, and are continuing to evolve. We have looked into the past of Securitas, which is also a competitor in the physical security business in Turkey (Exhibit 7). Naturally, Securitas has done a substantial amount of international expansion over the years, and this is not the strategy of Akdeniz at present, but the core structural model Securitas has built appears similar to what Akdeniz is going for. The expansion of Securitas has predominantly been inorganic through buyouts, particularly since 2000, and through adding new products, and especially through the introduction of new technology, such as mobile security solutions.

EXHIBIT 7: Evolvement of Securitas versus the New Strategy of Akdeniz

Evolvement of Securitas	Evolvement of Akdeniz
Established in 1934	Established in 2001
Kicks of the Alarm Arm (1949)	Becomes one of the leading security firms in Turkey and kicks off the Alarm arm (2007)
Starts international expansion and listing in Stockholm as Sweden's leading security firm(1985)	Starts serving international markets 2011)
Buys the leading lock group (1994)	Starts mobile guarding services (2011)
Starts cash handling (1997)	Listing in Istanbul (2012)
Starts (re)building technology (2013)	Plans to acquire mobile solutions and security software business, along with investing in defense equipment (2017)
Invests in mobile guading services and technology solutions (2014)	
Aquires leading electronic securities firms in LATAM, N America, and EU (2016)	

Source: Securitas, Akdeniz

Apart from enhancing its own alarm systems business, Akdeniz has announced talks for two partnerships. We believe both complement the know-how of the management and business.

1. 50% stake in system solutions firm Tanitek
2. 50% stake in specialty defense vehicle producer Mai

Both of these businesses will be consolidated proportionally, and while not disclosed by the company, from what we understand the costs of forming these partnerships are unlikely to exceed TL20m.

Tanitek, a local software firm (http://www.tanitek.com.tr/en/about-us). Tanitek was formed in 2014 by a former police force secret service officer, Mustafa Hararci, who is still leading the business along with his four software developers. The company provides solutions for specialized state and local municipality projects, such as license plate recognition software, management systems, vehicle and human tracing systems, biometric control systems, and mobile face recognition systems. The company is headquartered within the tech park of the Middle East Technical University (ODTU), Turkey’s top and one of the world’s most renowned tech universities, and software produced on site is exempt from corporate tax. It has TL0.5m net cash on its balance sheet.

EXHIBIT 8: Tanitek: Business Lines

Platurk	PoinTR	TekTakip	BikSis	DoorBino
Software: Licence plate recognition software	Hardware - Traffic tracing system hardware for municipalities.	Tracing systems: Vehicles, humans, animals etc.	Tracing systems to replace probation officers.	Mobile security interface to replace door viewer peeps.

EXHIBIT 9: Tanitek: Guided Business Outlook: 2016-2020E

TL (000)	2016	2017E	2018E	2019E	2020E
Revenue	5,532	9,562	41,499	51,542	54,892
Growth %	n.m.	72.8%	334.0%	24.2%	6.5%
EBITDA	4,736	5,871	14,110	12,628	12,351
Growth %	n.m.	24.0%	140.3%	-10.5%	-2.2%
EBITDA Marg.	85.6%	61.4%	34.0%	24.5%	22.5%
Net Income	4,710	5,803	10,970	8,540	8,339
Growth %	n.m.	23.2%	89.0%	-22.1%	-2.4%
Net Debt	-546	10,000	12,000	9,000	6,000

Source: The Company, Gedik Estimates

In more detail, the near and medium term business plan of Tanitek products are as follows:

Platurk: This is the software arm and has been working with the General Directorate of Police and Security since the end of 2016 and set up the core software systems for the organization. The company expects to generate TL10m in revenues from these projects in 2018 (guided net margin: 40%).

POINTR: This is the hardware arm of Tanitek. The government recently granted local municipalities the right to set up traffic-tracing systems whereby there will be allocated 30% of all citation revenues. Presently, only 5% of Turkish municipalities are equipped with such systems and the company is already in talks with two municipalities for system set up and expects to generate additional TL9m revenues (guided net margin: 20%). The state segment apart, the government also enforced all malls to install license recognition systems and 2,500 pieces of equipment are expected to be used by the end of the first half of 2018 and the company believes it can provide 35% of these. In 2018, the company expects to generate TL4m from such projects (2 projects already completed).

TEKTAKIP: This is the tracing equipment arm of Tanitek. The first sales are expected to begin in 2018. Products are aimed at a wide clientele range including vehicles, humans (15m kids in Turkey), animals, delivery and rental companies, along with the health sector (200k Alzheimer patients in Turkey). These products require very low power usage, and, depending on its options, can be traced for up to six months. Recently, the company made an offer to supply TL58m worth of products (46k units) to the police force (guided net margin: 60%). Equipment sales apart, the company aims to charge a monthly service fee for all users two years post equipment sales, which should generate a high margin and sustainable cash flow.

BIKSIS: This is an arm also targeting the tracing business, but its difference to TEKTAKIP is that the product is aimed at replacing probation officers, and hence, the Turkish Justice System. First, the first overall Turkish test was done by BIKSIS systems in the city of Sakarya (an industrial city 140km east of Istanbul) in 2015 and helped to save TL2m annually in personnel costs. Management says the business has an immediate TL100m business potential for the Turkish market (guided net margin 60%).

DoorBino: DoorBino aims to serve the security business with mobile interfaces. In essence, the business aims to replace all door peepholes with a mobile interface that will include a face and emotion recognition system. The software is still being developed.

Mai is a flagship special purpose vehicle producer and the planned purchase is TL10m for a 50% stake (http://www.maigroup.com.tr/EN/). Mai was formed in 2008 and serves the defense industry along with specialized vehicles such as fire and garbage trucks as a subcontractor. However, the main objective of the takeover is to capitalize on Turkey's growing defense business (see exhibit 10). The company is a bespoke producer and custom builds defense vehicles based on its know-how in design, and prides itself on its short lead time. The business line of the company includes Special Armored Vehicle design, Civil Armored Vehicles, Masked-Armored Staff Carriers, Crime Scene Investigation Vehicles, 4x4 and 8x8 Armored Vehicles, Ammunition Transport Vehicles, and Arrested and Condemned Transport Vehicles. The company is headquartered in Ankara and has 5000sqm of production space and has the capability to produce 1,200 vehicles per year. The company has no debt, employs 10 people, and has the know-how and capability in subcontracting its production personnel through Minerva, a separate JV with the Dubai-based manufacturer formed earlier this year. This venture also has an objective of market sharing in exports (see below).

EXHIBIT 10: Turkey - Defense Spending by Segment: 2016-2020

TL mn	2016	2017	2018	2019E	2020E
Ministry of Defence	26,451	28,676	40,400	48,480	58,176
Security Forces	21,140	23,218	27,792	33,350	40,020
Gendarmerie	8,276	9,119	13,311	15,973	19,168
Intelligence Agency	1,636	1,805	2,335	2,802	3,362
Defense Support Fund	8,000	10,000	18,000	21,600	25,920
Undersecret. of Def.	57	62	66	79	95
Ministry of Interior	4,674	5,202	7,300	8,760	10,512
Coast Guard	577	624	683	820	984
Public Order and Sec.	20	24	18	22	26
Total	70,831	78,730	109,905	131,886	158,263

EXHIBIT 11: Mai: Revenue and EBITDA Guidance: 2015-2020E

TL (000)	2015	2016	2017E	2018E	2019E	2020E
Revenue	16,022	8,545	5,325	115,862	219,565	325,452
Growth %	n.a.	-46.7%	-37.7%	n.m.	89.5%	48.2%
EBITDA	2,960	779	486	15,062	28,543	42,309
Growth%	n.m.	-73.7%	-37.7%	n.m.	89.5%	48.2%
EBITDA Mar.	18.5%	9.1%	9.1%	13.0%	13.0%	13.0%
Net Income	2,171	1,067	219	8,472	18,596	28,991
Growth %	n.m.	-50.9%	-79.4%	n.m.	119.5%	55.9%
Net Debt	-2,867	-1,713	-608	20,000	15,000	10,000

Source: The Company, Gedik Estimates

The potential business and growth strategy of Mai:

Targeting the smaller segment. The company was a subcontractor for Anadolu Isuzu, but the contract was ended at the beginning of 2017. Turkey will be expanding its defense budget by 40% in 2018, which in our view will be expanded by at least 20% annually until 2020. The total segment is worth USD1.6b annually and 80% is dominated by the big players, such as Otokar, Nurol, and BMC. Mai is targeting the remaining 20%, where smaller, non-standardized vehicles are required and core producers lack the flexibility in producing them and do not invest in doing so.

Substantial opportunity for Mai in 2018. Turkey announced the purchase of 2,500 specialized defense vehicles in 2018, which according to our conservative calculations is proposing a business volume of USD375m. In theory, this business will be chased by 6 candidates (BMC, Otokar, Nurol, BEST, Mai, and Katmerciler). However, realistically, large players are unlikely to be interested in these smaller and more customized projects, let alone their capacity concerns. As a result, the USD375m is likely to be distributed at most among 4-5 candidates, in our view.

A potential subcontractor for firms with capacity constraints. Some players in the market appear to have overbooked their capacities with taken orders, and Mai has already made headway in becoming a subcontractor.

EXHIBIT 12: Mai Product Picture

EXHIBIT 13: Mai Product Picture

Source: Mai, Minerva (MSPV)

Export potential and partnership with Minerva (www.mspv.com). The company formed a JV with the Dubai-headquartered Minerva Special Purpose Vehicle Company in March 2017 (Mai 51%/Minerva 49%). Minerva has a similar production scope to Mai and a similar annual capacity (in Dubai), but to us, appears to have a more established specialized defense vehicle track record, with production facilities in Kenya, India, and Jordan. The key aim of this partnership is to (1) use Minerva's R&D and workforce know-how—three prototypes are already developed and order build-up work has begun, and (2) use Turkey as a base of production and exports to markets Minerva is unable to sell to from the UAE. N Africa is a key market, and the venture already has talks to land an order from Nigeria.

Financial analysis of Akdeniz Guvenlik—expecting consolidated net income to grow by 120% in 2018, followed by a 25% p.a increase over 2018-2020. We prepared a pro-forma income statement for the company based on our estimates in the security business, Tanitek, and Mai. According to our estimates, the new businesses should comprise 16% of total revenues in 2018, increasing to 25% in 2020 and to 32% in 2023. On the other hand, the EBITDA contribution of the new businesses should be stronger due to their higher margin contribution. In 2018, the new business should be contributing 26% of the total EBITDA, rising to over 67% in 2020, and to nearly 70% by 2023.

Growth likely to be driven with almost no impact on leverage ratios and working capital, in our view. We expect the company to have a normalized net debt-to-EBITDA ratio in the 50% range as the impact of the new businesses are unlikely to have a substantial impact on WIC. This is because: (a) on defense vehicle orders the Ministry of Defense is typically making an advance payment of 25-30% of the order size, which should make up for nearly 90% of the WIC needed for the project (we feel, this ratio will be higher, but use the lower figure for prudency purposes), (b) on Tanitek, the company generally provides software and outsources all the hardware production. There is likely to be an exception sometime later in 2018, when it may have to buy the hardware for Biksis, which is expected to create a TL20-25m financing need.

EXHIBIT 14: Akdeniz: Breakdown of Revenues (2016-2021E)

	2016	2017	2018E	2019E	2020E	2021E
Security	467,492	373,994	413,899	451,481	485,635	519,921
% of Total	100	100	84	77	72	71
Tanitek	N.A	N.A	20,750	25,771	27,446	29,093
% of Total	N.A	N.A	4	4	4	4
Mai	N.A	N.A	57,931	109,783	162,726	187,135
% of Total	N.A	N.A	12	19	24	25
Total	467,492	373,994	492,579	587,034	675,807	736,149

EXHIBIT 15: Akdeniz: Breakdown of EBITDA (2016-2021E)

	2016	2017	2018E	2019E	2020E	2021E
Security	16,322	9,350	12,003	13,093	14,083	15,078
% of Total	100	100	45	39	34	32
Tanitek	N.A	N.A	7,055	6,314	6,175	8,001
% of Total	N.A	N.A	27	19	15	17
Mai	N.A	N.A	7,531	14,272	21,154	24,328
% of Total	N.A	N.A	28	42	51	51
Total	16,322	9,350	26,589	33,679	41,413	47,406

Source: Company Data, Gedik Estimates

EXHIBIT 16: Akdeniz – Pro-forma Income statement (2016-2021E)

Income Statement (TL 000)	2016	2017E	2018E	2019E	2020E	2021E
Revenues	467,492	373,994	492,579	587,034	675,807	736,149
COGS	-447,900	-359,034	-452,826	-528,768	-607,467	-658,386
Gross Profit	19,592	14,960	39,754	58,266	68,341	77,763
Operating Expenses	-11,523	-8,602	-17,716	-25,104	-32,343	-36,160
Operating Income	8,069	6,358	22,037	33,162	35,997	41,603
Other Operatıng Income	4,553	5,610	6,208	6,772	7,285	7,799
Total Operatıng Income	12,622	11,968	28,246	39,934	43,282	49,402
Other non-operating income, net	768	632	700	763	821	879
Financial Income, net	-1,911	-1,037	-3,538	-3,029	-2,509	-1,988
Earnings Before Tax	11,480	11,563	25,159	31,829	39,692	45,669
Taxes Paid	-2,374	-2,313	-4,804	-6,651	-8,529	-9,763
Net Earnings	9,106	9,251	20,356	25,178	31,163	35,906
EBITDA	16,322	9,350	26,589	33,679	41,413	47,406
Net Debt	7,150	17,235	25,306	18,718	21,603	24,365

Margins	2016	2017E	2018E	2019E	2020E	2021E
Gross Margin	4.2%	4.0%	8.1%	9.9%	10.1%	10.6%
Operating margin	2.7%	3.2%	5.7%	6.8%	6.4%	6.7%
EBITDA margin	3.5%	2.5%	5.4%	5.7%	6.1%	6.4%
Net margin	1.9%	2.5%	4.1%	4.3%	4.6%	4.9%
Net debt to EBITDA	43.8%	184.3%	95.2%	55.6%	52.2%	51.4%

Source: Company Data, Gedik Estimates

Valuation: target price: TL10.2/share, sum of the parts indicating a 79.3% upside, and trades on low multiples as well: Key arguments for our valuation conclusion are as follows and valuation tables for all businesses are provided in upcoming pages:

DCF: We believe the model is _very_ conservative on the operating inputs, particularly for Mai.

(a) **Mai:** The Company is the more important value driver of the model. For the top line of Mai, we felt the guidance of the management is reasonable given the size of the potential business and the handful amount of candidates. On the other hand, we have been more conservative on our margin assumptions. The management expects the business to generate a 15% EBITDA margin, while we begin with a 13% initial assumption, with a reduction to 10.5% along the way to our terminal period. More importantly, we use quite a decent amount of working capital, whereas as mentioned in earlier sections, the working capital requirement is essentially being financed by down payments at the moment of order placement. Hence, it is hard to think for Akdeniz, which is a regular dividend payer and pledges to pay at least 50% of its distributable earnings, not to pay dividends from this business, whist this is not assumed as a base case. Akdeniz has paid an average of 49% of its distributable profits since its listing.

(b) **Tanitek:** In the business model, we used a slightly lower top line for 2018 and 2019, but nearly half the management guidance on margins post 2018. Also, we assumed an in-line CPI top-line growth rate for the company post 2019.

(c) **Akdeniz Security:** With the management focus on turning back low margin deals and keeping the business profitable, we assumed a 40bps recovery in EBITDA margins continuing for the terminal period. In terms of growth, we assumed an in-line CPI growth for the backlog and top line. The company is looking to grow its alarm business in the future, but no assumption is made in modelling this.

EXHIBIT 17: Akdeniz – Valuation

Businesses		Implied Value	Stake	Value of Stake
Akdeniz Guvenlik	DCF	66.2	100.0%	66.2
Mai	DCF	418.6	50.0%	209.3
Tanitek	DCF	119.4	50.0%	59.7
Fair Value Of Akdeniz				336.3
Purchase Price of New Ventures (-)				20.0
Final Fair Value of Akdeniz				316.3
Market Capitalisation				176.4
Upside				79.3%
Current Price				5.69
12m Target Price				10.20
Implied fair Value PE Multiple on 2020E				10.1
Implied Fair Value EV/EBITDA multiple on 2020E				8.2
PE multiple at Current Share Price (2020E)				5.7
EV/EBITDA Multiple at Current Share Price (2020E)				4.8

Source: Company Data, Gedik Estimates

Implied PE and EV/EBITDA, trading at low forecasted multiples. Currently, the stock trades at 18.8x on trailing multiples, but this is not the normalized valuation for the stock since the picture is likely to change completely once the proposed partnerships occur and begin generating business flow. The PE ratio drops to 8.5x on our 2018 estimates, and further to 6.8x and 5.5x, respectively, based on our 2019 and 2020 estimates. Similarly, a trailing EV/EBITDA multiple of over 19x should fall to 7x on our 2018, 5.7x on our 2019, and 4.8x on our 2020 estimates. In terms of the implied multiples, our fair-value estimate derives a P/E multiple of 10.1x and EV/EBITDA multiple of 8.2x, which is still quite attractive given sectoral companies tend to trade in the mid-teen EBITDA multiples. Mai's nearest listed competitor, Katmerciler, trades on 8x EV/EBITDA and 15x earnings based on 2018 consensus estimates.

Risks: We believe there are three risks involved with our models. The first and most important risk is execution risk. While the management of both Tanitek and Mai ensured that news flow of new deals would be imminent, the partnership deals are not yet closed. However, both firms need the credibility and co-signment of Akdeniz to be able have the necessary letters of guarantee to be able to be awarded with government orders. Hence, these partnerships appear to be in the interest of all parties. Secondly, most deals involve government consistency. Akdeniz has a clear know-how in getting business from the government, but the potential hiccup of a change in government could delay its execution power. Thirdly, a further rise in interest rates and a higher sustainable rfr assumption could pressure fair-value estimates further, which is true for all Turkish valuations.

EXHIBIT 18: Akdeniz – Security DCF Valuation

TLmn	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Revenues	**413.9**	**451.5**	**485.6**	**519.9**	**556.6**	**595.9**	**638.0**	**683.0**	**731.3**	**782.9**
Growth%	10.7%	9.1%	7.6%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%
EBITDA	**12.0**	**13.1**	**14.1**	**15.1**	**16.1**	**17.3**	**18.5**	**19.8**	**21.2**	**22.7**
Growth%	28.4%	9.1%	7.6%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%	7.1%
EBITDA Margin	**2.9%**	**2.9%**	**2.9%**	**2.9%**	**2.9%**	**2.9%**	**2.9%**	**2.9%**	**2.9%**	**2.9%**
EBIT	14.1	15.4	16.5	17.7	18.9	20.3	21.7	23.2	24.9	26.6
Unlevered Taxes	-3.1	-3.4	-3.6	-3.9	-4.2	-4.5	-4.8	-5.1	-5.5	-5.9
Effective Tax Rate	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
NOPAT	**11**	**12**	**13**	**14**	**15**	**16**	**17**	**18**	**19**	**21**
NOPAT Margin	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%	2.7%
Capital Expenditure	-3.3	-2.3	-2.4	-2.6	-2.8	-3.0	-3.2	-3.4	-3.7	-3.9
Depreciation	-2.1	-2.3	-2.4	-2.6	-2.8	-3.0	-3.2	-3.4	-3.7	-3.9
Change in Net WC	4.7	5.4	4.9	4.9	5.3	5.6	6.0	6.5	6.9	7.4
Free Cash Flow	**1**	**2**	**3**	**4**	**4**	**4**	**5**	**5**	**5**	**6**
WACC:	13.1%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	13.0%	12.9%	12.9%
Discount Factor:	0.99	0.87	0.77	0.68	0.60	0.54	0.47	0.42	0.37	0.33
DCF	**0.8**	**1.8**	**2.4**	**2.5**	**2.4**	**2.3**	**2.1**	**2.0**	**1.9**	**1.8**
Sum of DCF	**39.1**									
Perpetuity growth rate	**0.1**									
Terminal Value	**121.0**									
PV of Terminal Value	**39.8**									
Enterprise Value	**78.9**									
Net Debt (cash) (Q3 17)	**12.7**									
Present Value	**66.2**									

Source: Company Data, Gedik Estimates

EXHIBIT 19: Mai – DCF Valuation

TLmn	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Revenues	**116**	**220**	**325**	**374**	**430**	**495**	**569**	**655**	**753**	**828**
Growth%		89.5%	48.2%	15.0%	15.0%	15.0%	15.0%	15.0%	15.0%	10.0%
EBITDA	**15**	**29**	**42**	**49**	**54**	**59**	**65**	**72**	**79**	**87**
Growth%	nm	90%	48.2%	15.0%	10.6%	10.4%	10.2%	10.0%	9.8%	10.0%
EBITDA Margin	**13.0%**	**13.0%**	**13.0%**	**13.0%**	**12.5%**	**12.0%**	**11.5%**	**11.0%**	**10.5%**	**10.5%**
EBIT	13.9	26.1	38.7	43.5	47.7	52.0	56.6	61.8	67.3	73.5
Unlevered Taxes	-3.1	-5.8	-8.6	-9.7	-10.6	-11.5	-12.6	-13.7	-14.9	-16.3
Effective Tax Rate	22%	22%	22%	22%	22%	22%	22%	22%	22%	22%
NOPAT	**11**	**20**	**30**	**34**	**37**	**40**	**44**	**48**	**52**	**57**
NOPAT Margin	9.3%	9.2%	9.2%	9.0%	8.6%	8.2%	7.7%	7.3%	7.0%	6.9%
Capital Expenditure	-4.5	-4.9	-5.2	-5.5	-5.8	-6.2	-6.5	-6.9	-7.3	-7.8
Depreciation	1.2	2.5	3.6	5.1	6.1	7.4	8.9	10.2	11.7	13.5
Change in Net WC	29.0	32.0	17.8	11.2	12.9	9.8	17.1	19.6	22.6	17.3
Free Cash Flow	**-22**	**-14**	**11**	**22**	**24**	**32**	**29**	**32**	**34**	**46**
WACC:	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%	15.8%
Discount Factor:	1.00	0.86	0.75	0.64	0.56	0.48	0.41	0.36	0.31	0.27
DCF	**-21.5**	**-12.1**	**8.0**	**14.3**	**13.6**	**15.3**	**12.1**	**11.3**	**10.5**	**12.1**
Sum of DCF	**63.7**									
Perpetuity growth rate	12.0%									
Terminal Value	1,331.8									
PV of Terminal Value	**354.9**									
Present Value	**418.6**									

Source: Company Data, Gedik Estimates

EXHIBIT 20: Tanitek – DCF Valuation

TLmn	2018E	2019E	2020E	2021E	2022E	2023E	2024E	2025E	2026E	2027E
Revenues	**41.5**	**51.5**	**54.9**	**58.2**	**61.7**	**65.4**	**69.3**	**73.5**	**77.9**	**82.5**
Growth%	334.0%	24.2%	6.5%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
EBITDA	**14.1**	**12.6**	**12.4**	**16.0**	**17.0**	**18.0**	**19.1**	**20.2**	**21.4**	**22.7**
Growth%	140.3%	-10.5%	-2.2%	29.6%	6.0%	6.0%	6.0%	6.0%	6.0%	6.0%
EBITDA Margin	**34.0%**	**24.5%**	**22.5%**	**27.5%**	**27.5%**	**27.5%**	**27.5%**	**27.5%**	**27.5%**	**27.5%**
EBIT	13.7	11.9	11.5	15.1	16.0	17.0	18.0	19.1	20.2	21.5
Unlevered Taxes	-2.5	-2.1	-2.1	-2.7	-2.9	-3.1	-3.2	-3.4	-3.6	-3.9
Effective Tax Rate	18%	18%	18%	18%	18%	18%	18%	18%	18%	18%
NOPAT	**11**	**10**	**9**	**12**	**13**	**14**	**15**	**16**	**17**	**18**
NOPAT Margin	27.1%	18.9%	17.2%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%	21.3%
Capital Expenditure	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5	-0.5
Depreciation	0.4	0.8	0.8	0.9	0.9	1.0	1.0	1.1	1.2	1.2
Change in Net WC	14.7	2.9	-4.1	-4.8	0.7	0.7	-2.2	0.8	0.9	0.9
Free Cash Flow	**-4**	**7**	**14**	**18**	**13**	**14**	**18**	**15**	**16**	**17**
WACC:	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%	16.2%
Discount Factor:	0.98	0.84	0.72	0.62	0.54	0.46	0.40	0.34	0.29	0.25
DCF	**-3.5**	**6.0**	**10.1**	**11.0**	**6.9**	**6.3**	**7.0**	**5.3**	**4.8**	**4.4**
Sum of DCF	**61.6**									
Perpetuity growth rate	8.0%									
Terminal Value	227.9									
PV of Terminal Value	**57.6**									
Enterprise Value	**119.2**									
Net Debt (cash)	0.0									
Present Value	**119.2**									

Source: Company Data, Gedik Estimates

EXHIBIT 21: Akdeniz – Security Income statement (2016-2021E)

Income Statement (TL 000)	2016	2017E	2018E	2019E	2020E	2021E
Revenues	467,492	373,994	413,899	451,481	485,635	519,921
COGS	-447,900	-359,034	-397,343	-428,907	-466,210	-499,124
Gross Profit	19,592	14,960	16,556	22,574	19,425	20,797
Operating Expenses	-11,523	-8,602	-9,520	-10,384	-11,170	-11,958
Operating Income	8,069	6,358	7,864	8,578	9,227	9,879
Other Operatıng Income	4,553	5,610	6,208	6,772	7,285	7,799
Total Operatıng Income	12,622	11,968	14,073	15,350	16,512	17,677
Other non-operating income, net	768	632	700	763	821	879
Financial Income, net	-1,911	-1,037	-1,138	-1,229	-1,309	-1,388
Earnings Before Tax	11,480	11,563	13,634	14,884	16,023	17,169
Taxes Paid	-2,374	-2,313	-2,999	-3,275	-3,525	-3,777
Net Earnings	9,106	9,251	10,635	11,610	12,498	13,391
EBITDA	16,322	9,350	12,003	13,093	14,083	15,078
Net debt / (cash)	7,150	11,467	15,306	18,718	21,603	24,365

Margins	2016	2017E	2018E	2019E	2020E	2021E
Gross Margin	4.2%	4.0%	4.0%	5.0%	4.0%	4.0%
Operating margin	1.7%	2.0%	1.9%	1.9%	1.9%	1.9%
EBITDA margin	3.5%	2.5%	2.9%	2.9%	2.9%	2.9%
Net margin	1.9%	2.5%	2.6%	2.6%	2.6%	2.6%

Source: Company Data, Gedik Estimates

EXHIBIT 22: Mai – Income statement (2016-2021E)

Income Statement (TL 000)	2016	2017E	2018E	2019E	2020E	2021E
Revenues	8,545	5,325	115,862	219,565	325,452	374,270
COGS, excluding depreciation	-6,360	-3,941	-86,897	-164,674	-244,089	-280,702
Gross Profit	2,185	1,385	27,766	52,439	77,722	88,443
Operating Expenses	-1,703	-1,123	-13,903	-26,348	-39,054	-44,912
Operating Income	482	262	13,862	26,091	38,668	43,531
Other non-operating income, net	858	19	0	0	0	0
Financial Income, net	-5	-6	-3,000	-2,250	-1,500	-750
Earnings Before Tax	1,335	274	10,862	23,841	37,168	42,781
Taxes Paid	-268	-55	-2,390	-5,245	-8,177	-9,412
Net Earnings	1,067	219	8,472	18,596	28,991	33,369
EBITDA	779	486	15,062	28,543	42,309	48,655
Net debt / (cash)	-1,713	-605	353	47	-1,096	-3,095

Margins	2016	2017E	2018E	2019E	2020E	2021E
Gross Margin	25.6%	26.0%	26.0%	26.1%	26.1%	26.4%
Operating margin	5.6%	4.9%	12.0%	11.9%	11.9%	11.6%
EBITDA margin	9.1%	9.1%	13.0%	13.0%	13.0%	13.0%
Net margin	12.5%	4.1%	7.3%	8.5%	8.9%	8.9%

Source: Company Data, Gedik Estimates

EXHIBIT 22: Tanitek – Income statement (2016-2021E)

Income Statement (TL 000)	2016	2017E	2018E	2019E	2020E	2021E
Revenues	5,532	9,562	41,499	51,542	54,892	58,186
COGS	-150	-3,347	-24,069	-35,048	-38,424	-37,821
Gross Profit	5,382	6,215	17,430	16,493	16,468	20,365
Operating Expenses	-670	-191	-2,490	-3,093	-3,294	-3,491
Operating Income	4,712	6,024	14,940	13,401	13,174	16,874
Other Operatıng Income	0	-220	-1,245	-1,546	-1,647	-1,746
Total Operatıng Income	4,712	5,804	13,695	11,855	11,527	15,128
Financial Income, net	0	0	-1,500	-1,800	-1,350	-900
Earnings Before Tax	4,710	5,803	12,189	10,047	10,169	14,220
Taxes Paid	0	0	-1,219	-1,507	-1,830	-2,560
Net Earnings	4,710	5,803	10,970	8,540	8,339	11,660
EBITDA	4,736	5,871	14,110	12,628	12,351	16,001
Net debt / (cash)	-546	-8,422	-32,909	-39,577	-41,344	-43,260

Margins	2016	2017E	2018E	2019E	2020E	2021E
Gross Margin	97.3%	65.0%	42.0%	32.0%	30.0%	35.0%
Operating margin	85.2%	63.0%	36.0%	26.0%	24.0%	29.0%
EBITDA margin	85.6%	61.4%	34.0%	24.5%	22.5%	27.5%
Net margin	85.1%	60.7%	26.4%	16.6%	15.2%	20.0%

Source: Company Data, Gedik Estimates

VALUATION & RATING METHODOLOGY:

Valuation tools employed most frequently are Discounted Cash Flow (DCF) and International Peer Comparison, though other metrics such as Dividend Discount, Historical Relative Valuation, and Replacement Value are also used wherever appropriate. Gedik Investment analysts set the target values with a 12-month investment horizon and calculate the potential return of each stock via using only one tool or more than one tool, assigning different weights for each. Our 12-month company rating system includes the following recommendations: **BUY**, **HOLD** and **SELL**. The ratings are determined as follows:

BUY: If 12-month total return of the stock is expected to exceed BIST100 by more than 20%.

HOLD: If 12-month total return of the stock is expected to perform in-line with BIST100 within a range of +20/-5%.

SELL: If 12-month total return of the stock is expected to be below BIST100 by more than 5%.

Rating Methodology	Potential Return (PR)
BUY	PR > +20%
HOLD	-5% <= PR <= +20%
SELL	PR < -5%

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