



**EXPERT SYSTEM GROUP  
CONSOLIDATED FINANCIAL STATEMENTS  
for the year ended 31/12/2017**



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# CORPORATE BODIES

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## Board of Directors

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<i>Chairman of the Board of Directors</i>	MARCO VARONE
<i>Chief Executive Officer</i>	STEFANO SPAGGIARI
<i>Director</i>	PAOLO LOMBARDI
<i>Director</i>	ANDREA MELEGARI
<i>Director</i>	GABRIELLA FRANZINI
<i>Director</i>	MARCELLO PELLACANI
<i>Independent director</i>	ALBERTO SANGIOVANNI VINCENTELLI

## Board of Statutory Auditors

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<i>Chairman of the Board of Statutory Auditors</i>	ALESSANDRO AUGUSTO
<i>Standing auditor</i>	ANDREA CUOGHI
<i>Standing auditor</i>	ANTONIO TAZZIOLI

## CONSOLIDATED FINANCIAL STATEMENTS AS AT 31/12/2017



### BALANCE SHEET

ASSETS	31/12/2017	31/12/2016
<b>A) SUBSCRIBED CAPITAL, UNPAID</b>		
<b>Total subscribed capital, unpaid (A)</b>		<b>0</b>
<b>B) FIXED ASSETS</b>		
I - Intangible fixed assets		
1) Start-up and expansion costs	1,230,579	1,173,693
2) Development costs	9,643,245	8,517,071
3) Industrial patent and intellectual property rights	34,232	56,692
4) Concessions, licences, trademarks and similar rights	3,860	4,589
5) Goodwill	6,010,757	8,618,260
6) Fixed assets in progress and payments on account	20,798	0
7) Other	585	2,160
Total intangible fixed assets	16,944,056	18,372,465
II - Tangible fixed assets		
1) Land and buildings	362,737	373,824
2) Plant and machinery	11,142	17,290
4) Other assets	417,988	523,408

Total tangible fixed assets	791,868	914,522
III - Non-current financial assets		
1) Equity investments		
b) associates	251,266	251,266
d-bis) other companies	57,138	57,138
Total equity investments	308,405	308,404
2) Receivables		
b) Due from associates		
After 12 months	733,823	701,809
Total receivables due from associates	733,823	701,809
d-bis) Due from others		
Total Receivables (2)	733,823	701,809
3) Other securities		
	85,952	81,388
Total non-current financial assets	1,128,180	1,091,601
<b>Total fixed assets (B)</b>	<b>18,864,103</b>	<b>20,378,588</b>

### C) CURRENT ASSETS

I - Inventories		
1) Raw materials and consumables	0	8157
3) Contract work in progress	99,207	619,326
Total inventories	99,207	627,483
II - Receivables		
1) Due from customers		
Within 12 months	12,384,149	10,232,836
Total receivables due from customers	12,384,149	10,232,836
2) Due from subsidiaries		
Within 12 months	33,982	68,528
After 12 months	26,787	26,787
Total receivables due from subsidiaries	60,768	95,315
3) Due from associates		
Within 12 months	34,831	255,626

Total receivables due from associates	34,831	255,626
5-bis) Tax receivables		
Within 12 months	1,428,438	1,124,273
After 12 months	0	123,799
Total tax receivables	1,428,438	1,248,072
5-ter) Prepaid taxes	2,142,181	1,546,098
5-quater) Other receivables		
Within 12 months	4,056,590	6,232,652
After 12 months	993,497	1,245,897
Total other receivables	5,050,086	7,478,549
Total receivables	21,100,454	20,856,496
III - Current financial assets		
1) Equity investments in subsidiaries	4,583,074	4,153,074
4) Other equity investments	8,400	8,400
6) Other securities	26,002	1,299,646
Total current financial assets	4,617,476	5,461,120
IV - Cash and cash equivalents		
1) Bank and postal deposits	11,221,661	8,994,794
2) Cheques	10,000	0
3) Cash at bank and in hand	3,029	68,146
Total cash and cash equivalents	11,234,690	9,062,940
<b>Total current assets (C)</b>	<b>37,051,827</b>	<b>36,008,039</b>
<b>D) ACCRUALS AND DEFERRALS</b>	<b>582,304</b>	<b>1,003,638</b>
<b>TOTAL ASSETS</b>	<b>56,498,234</b>	<b>57,390,265</b>

LIABILITIES	31/12/2017	31/12/2016
<b>A) GROUP SHAREHOLDERS' EQUITY</b>		
I - Share capital	357,207	276,703
II - Share premium reserve	35,980,236	25,408,688
III - Revaluation reserves	0	0
IV - Legal reserve	43,899	43,899
V - Statutory reserves	0	0
VI - Other reserves, indicated separately		
Extraordinary reserve	1,493,354	3,618,898
Merger surplus reserve	376,622	376,622
Reserve for unrealised exchange gains	180,049	180,049
Consolidation reserve	0	0
Translation differences reserve	0	0
Miscellaneous other reserves	823,334	419,128
Total other reserves	2,873,359	4,594,697
VII - Cash flow hedging reserve	(20,924)	(6,954)
VIII - Retained earnings (losses)	(11,325,963)	(5,193,900)
IX - Profit (loss) for the year	(8,339,127)	(8,125,531)
X - Negative reserve for treasury shares in portfolio	(292,879)	(560,395)
Total consolidated shareholders' equity	19,275,808	16,437,207
Shareholders' equity pertaining to minority interests		
Minority interests in capital and reserves	0	0
Profit (loss) pertaining to minority interests	0	0
Total shareholders' equity pertaining to minority shareholders	0	0
<b>Total consolidated shareholders' equity</b>	<b>19,275,808</b>	<b>16,437,207</b>
<b>B) PROVISIONS FOR RISKS AND CHARGES</b>		
1) Pensions and similar obligations	4,341	4,341
2) Taxation, including deferred	872,557	688,100

3) Derivative financial instruments - liabilities	20,924	6,954
4) Other	50,595	16,981

<b>Total provisions for risks and charges (B)</b>	<b>948,418</b>	<b>716,376</b>
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<b>C) EMPLOYEE SEVERANCE INDEMNITY</b>	<b>1,876,192</b>	<b>1,670,520</b>
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#### **D) PAYABLES**

1) Bonds		
After 12 months	5,000,000	5,000,000
Total bonds	5,000,000	5,000,000
4) Payables due to banks		
Within 12 months	3,910,091	5,046,595
After 12 months	7,846,031	8,595,385
Total payables due to banks	11,756,122	13,641,980
5) Payables due to other lenders		
Within 12 months	1,465,781	1,172,677
After 12 months	1,836,515	1,656,532
Total payables due to other lenders	3,302,296	2,829,209
6) Payments on account		
Within 12 months	869,024	2,247,323
After 12 months	234,980	135,706
Total payments on account	1,104,005	2,383,029
7) Trade payables		
Within 12 months	2,224,541	2,698,583
After 12 months	0	40,216
Total trade payables	2,224,541	2,738,799
12) Tax payables		
Within 12 months	1,130,313	864,641
Total tax payables	1,130,313	864,641
13) Payables due to social security institutions		
Within 12 months	698,739	1,410,643
Total payables due to social security institutions	698,739	1,410,643

14) Other payables		
Within 12 months	2,583,753	1,962,195
After 12 months	0	500,000
Total other payables	2,583,753	2,462,195
<b>Total payables</b>	<b>27,799,769</b>	<b>31,330,496</b>
<b>E) ACCRUALS AND DEFERRALS</b>	<b>6,598,047</b>	<b>7,235,666</b>
<b>TOTAL LIABILITIES</b>	<b>56,498,234</b>	<b>57,390,265</b>

## INCOME STATEMENT

	31/12/2017	31/12/2016
<b>A) VALUE OF PRODUCTION</b>		
1) Sales and service revenues	26,136,230	23,367,938
3) Changes in contract work in progress	(527,733)	(1,169,763)
4) Own work capitalised	5,552,488	5,665,880
5) Other revenues and income		
Operating grants	46,402	264,134
Other	1,600,167	1,424,908
Total other revenues and income (5)	1,646,570	1,689,042
<b>Total value of production (A)</b>	<b>32,807,555</b>	<b>29,553,097</b>
<b>B) COSTS OF PRODUCTION:</b>		
6) Raw materials, consumables and goods for resale	1,614,418	1,057,169
7) For services	8,915,207	9,649,047
8) Use of third-party assets	1,673,817	1,803,011
9) Personnel:		
a) Salaries and wages	14,831,234	13,947,233
b) Social security costs	3,952,410	3,952,609
c) Employee severance indemnity	513,013	480,804
d) Pensions and similar charges	0	86,065
e) Other costs	12,970	19,398

Total personnel costs (9)	19,309,628	18,486,109
10) Amortisation, depreciation and write-downs:		
a) Amortisation of intangible fixed assets	7,184,613	6,056,703
b) Depreciation of tangible fixed assets	219,907	243,606
d) Write-down of receivables included in current assets and of cash and cash equivalents	102,421	3,050
Total amortisation, depreciation and write-downs (10)	7,506,942	6,303,359
12) Provisions for risks	35,414	0
14) Sundry operating expenses	248,162	803,076
<b>Total costs of production (B)</b>	<b>39,303,588</b>	<b>38,101,770</b>
<b>Difference between the value and costs of production (A-B)</b>	<b>(6,496,033)</b>	<b>(8,548,673)</b>
<b>C) FINANCIAL INCOME AND EXPENSES</b>		
15) Income from equity investments		
Other	0	73,593
Total income from equity investments (15)	0	73,593
16) Other financial income:		
a) From receivables classified as fixed assets		
From associates	23,724	11,809
Other	0	0
Total financial income from receivables classified as fixed assets	23,724	11,809
c) From securities included in current assets	2,783	2,645
d) Other income		
Other	17,608	42,333
Total other income (d)	17,608	42,333
Total other financial income (16)		
17) Interest and other financial expenses		
Other	(513,781)	(597,680)
Total interest and other financial expenses (17)	(513,781)	(597,680)
17-bis) Exchange gains and losses	(1,721,557)	311,888

<b>Total financial income and expenses (C) (15+16-17+-17-bis)</b>	<b>(2,191,223)</b>	<b>(155,412)</b>
<b>D) VALUE ADJUSTMENTS OF FINANCIAL ASSETS AND LIABILITIES:</b>		
18) Revaluations:		
c) Of securities included in current assets	0	0
Total revaluations (18)	0	0
19) Write-downs:		
c) Of securities included in current assets	0	(605)
Total write-downs (19)	0	(605)
<b>Total value adjustments to financial assets and liabilities (D) (18-19)</b>	<b>0</b>	<b>(605)</b>
<b>PRE-TAX RESULT (A-B+-C+-D)</b>	<b>(8,687,256)</b>	<b>(8,704,689)</b>
20) Income taxes for the year – current, deferred and prepaid		
Current taxes	(62,830)	(12,672)
Deferred and prepaid taxes	410,960	591,830
<b>Total income taxes for the year – current, deferred and prepaid</b>	<b>348,129</b>	<b>579,158</b>
<b>21) Consolidated profit (loss) for the year</b>	<b>(8,339,127)</b>	<b>(8,125,531)</b>
<b>Profit (loss) for the year pertaining to minority shareholders</b>	<b>0</b>	<b>0</b>
<b>Profit (loss) for the year pertaining to the Group</b>	<b>(8,339,127)</b>	<b>(8,125,531)</b>

## CASH FLOW STATEMENT

A) Cash flows from operating activities (indirect method)	31/12/2017	31/12/2016
Profit (loss) for the year	(8,339,127)	(8,125,531)
Income taxes	(348,129)	(579,158)
Interest expense/(income)	625,600	155,412
(Dividends)		0
(Capital gains)/Capital losses from asset disposals	(215)	0
<b>1. Profit/(Loss) for the year before income taxes, interest, dividends and capital gains/losses from disposals</b>	<b>(8,061,871)</b>	<b>(8,549,277)</b>
Allocation to provisions	513,013	566,869
Amortisation/Depreciation of fixed assets	7,404,520	6,300,309
Write-downs due to impairment	102,421	0
Adjustments to financial assets and liabilities associated with derivatives, non-monetary	0	0
Other adjustments for non-monetary items	0	0
<b>Total adjustments for non-monetary items with no balancing entry in net working capital</b>	<b>8,019,955</b>	<b>6,867,178</b>
<b>2. Cash flows before changes in net working capital</b>	<b>(41,916)</b>	<b>(1,682,099)</b>
<b>Changes in net working capital</b>		
Decrease/(Increase) in inventories	528,276	1,169,374
Decrease/(Increase) in receivables due from customers	(1,998,392)	(320,917)
Increase/(Decrease) in trade payables	(1,793,282)	(1,793,662)
Decrease/(Increase) in accrued income and prepaid expenses	421,334	34,765
Increase/(Decrease) in accrued expenses and deferred income	(637,619)	1,661,331
Other decreases/(Other increases) in net working capital	1,675,468	3,034,813
<b>Total changes in net working capital</b>	<b>(1,804,214)</b>	<b>3,785,704</b>
<b>3. Cash flows after changes in net working capital</b>	<b>(1,846,130)</b>	<b>2,103,605</b>
<b>Other adjustments</b>		
Interest collected/(paid)	(625,600)	(155,412)
(Income taxes paid)	0	0
Dividends collected	0	0
(Use of provisions)	(75,299)	(16,045)

Other collections/(payments)	0	0
<b>Total other adjustments</b>	<b>(700,899)</b>	<b>(171,457)</b>
<b>Cash flows from operating activities (A)</b>	<b>(2,547,030)</b>	<b>1,932,148</b>
<i>Tangible fixed assets</i>		
(Investments)	(98,028)	(242,397)
Disinvestments	991	0
<i>Intangible fixed assets</i>		
(Investments)	(5,756,206)	(5,890,142)
Disinvestments	0	0
<i>Non-current financial assets</i>		
(Investments)	(36,578)	(245,534)
Disinvestments	0	0
<i>Current financial assets</i>		
(Investments)	(430,000)	0
Disinvestments	1,273,643	46,000
(Acquisition of subsidiaries net of cash and cash equivalents)		0
Disposal of subsidiaries net of cash and cash equivalents		0
<b>Cash flows from investing activities (B)</b>	<b>(5,046,177)</b>	<b>(6,332,073)</b>
<i>Third party financing</i>		
Increase/(Decrease) in short-term bank payables	99,097	198,795
New loans	3,600,000	0
(Loan repayments)	(5,111,867)	(2,403,065)
<i>Own equity</i>		
Share capital increase against payment	11,177,726	4,417,808
(Repayments of share capital)	0	0
Disposal/(Purchase) of treasury shares	0	0
(Dividends and advances on dividends paid)	0	0
<b>Cash flows from funding activities (C)</b>	<b>9,764,956</b>	<b>2,213,538</b>
<b>Increase/(Decrease) in cash and cash equivalents (A ± B ± C)</b>		<b>(2,186,387)</b>
Cash and cash equivalents at start of year	9,062,940	11,249,327
Cash and cash equivalents at year end	11,234,690	9,062,940
<b>Increase/(Decrease) in cash and cash equivalents</b>	<b>2,171,750</b>	<b>(2,186,387)</b>

## REPORT ON OPERATIONS



### Group structure and business activities

Expert System is an Italian company, listed on the AIM of Borsa Italiana (EXSY), with registered offices in Europe and North America, which develops cognitive computing software based on artificial intelligence algorithms that simulate the human ability to read and understand language similar to the way people do.

Making use of solutions proposed by Expert System, government organisations and companies from all sectors can find, analyse and use information more effectively to obtain strategic data from it and take the best decisions, automate information processes and reduce operating risks.

By understanding the meaning of every word based on context with its software, and applying this capacity on a large scale to the automatic analysis of millions of documents, Expert System transforms information into usable knowledge. Cogito semantics technology, proprietary to Expert System, therefore becomes a useful tool for successfully conducting business activities, ensuring unquestionable benefits in the following areas, amongst others:

- **Defence and public safety:** crime control and prevention, support for intelligence analysts;
- **Banks and insurance companies:** self-help solutions in natural language and automatic e-mail management, operating process automation, analysis of customer communications, application of anti-money laundering and legal procedures;
- **Media and Publishing:** automatic tagging systems, content correlation and enhancement, faceted navigation, simplified introduction of innovative digital

products and services, intuitive content and data flow analysis;

- **Energy:** information management in the exploratory and production phases for oil and gas, trader activity support, management of information to protect production assets, the brand and employees on business travel, verification of the financial viability of counterparties and the prevention of accidents and production stoppages;
- **Healthcare and pharmaceutical industry:** analysis of information published in scientific and academic magazines, sector trend identification, patient opinion analysis, monitoring of rival product developments, identification and analysis of reports and publications by leading sector experts.

Now, unlike in the past, one of the precious assets of a business is represented by texts generated in-house, associated with general data or with detailed data and information not only in specific documents, but also in reports, presentations or analyses.

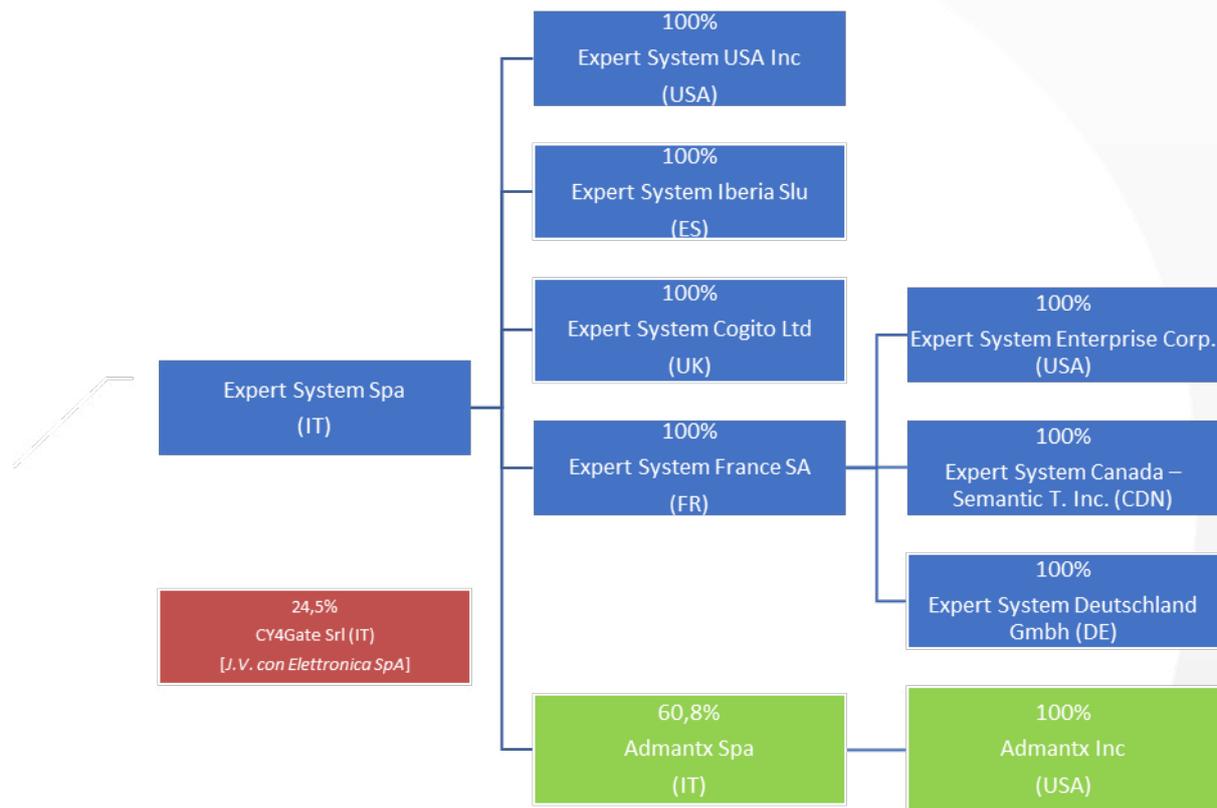
This information, if combined with content from social media or other external sources, can provide useful data to support as much recurring and daily activities as the more strategic activities such as, for example:

- **Customer requests management addressed to customer assistance:** in these circumstances, which can often give rise to a difficult situation involving not only the customer needing help, but also the call centre operators expected to provide them with support, Cogito simplifies the customer and operator support process, including in the form of FAQs, as it uses both the company's language and the customer's language, without needing to discard either of the two. It allows understanding of what customers say, leaving them free to express themselves in their normal fashion;
- **Process automation:** in our increasingly competitive market of today, technological innovation can offer banks and insurance companies effective tools to face the main challenges of business, automating the processes based on information processing, such as interaction with customers, management of reimbursement requests and form management, which traditionally call for considerable manual input, reducing operating costs and increasing customer satisfaction. Artificial intelligence solutions offer a return on investment (ROI) that is real and measurable. By understanding human-like requests, in fact, they allow a fast and accurate process and the extraction of data useful in assessing the requests and accelerating the response process;
- **Big data extraction and enhancement:** the identification of elements in content and the extraction of big data and personalised concepts is an intrinsic and highly advanced

function of Expert System technology. Counting on millions of word definitions and concepts and on several million relations already defined, Cogito cognitive technology includes context-based language meaning, reading the content in a very human-like way. This means that the capacity can be increased to automatically understand content and identify the most significant information in the text. It is possible to identify, tag or extract persons, places, organisations, companies, URLs, e-mail addresses, telephone numbers and values such as dates, currencies and denominations, percentages and practically any data considered necessary. Unlike other text analytics approaches, with Cogito's data extraction software there are no lists to create or even to manage;

- **Social media monitoring:** in all sectors, companies are acquiring increasing awareness of the potential and importance of the main digital channel where conversations begin: social media. The social media monitoring tools based on Expert System's cognitive technology allow companies to manage, analyse and extract data from billions of posts, profiles, comments and conversation threads. To capture the unique and personal methods used by customers to express themselves on social media, the expressions and, in general, the language in all its nuances have to be understood. If you need to understand what is being expressed, the best way is to be fully conversant with the language used. Instead of limiting itself to listening, through its cognitive capacity for understanding the exclusive aspects of social language (slang, jargon, acronyms and abbreviations, etc.) Cogito cognitive technology offers social media monitoring that helps to capture and understand customers as they express themselves, understanding intent and sentiment present in the information. Expert System's social media monitoring solutions offer up different capabilities, such as identifying trends and preferences or the first signs that something works (or not) in a product or service, so that it can be used to provide support to various company departments, from marketing intelligence to product development, from competition research to customer service.

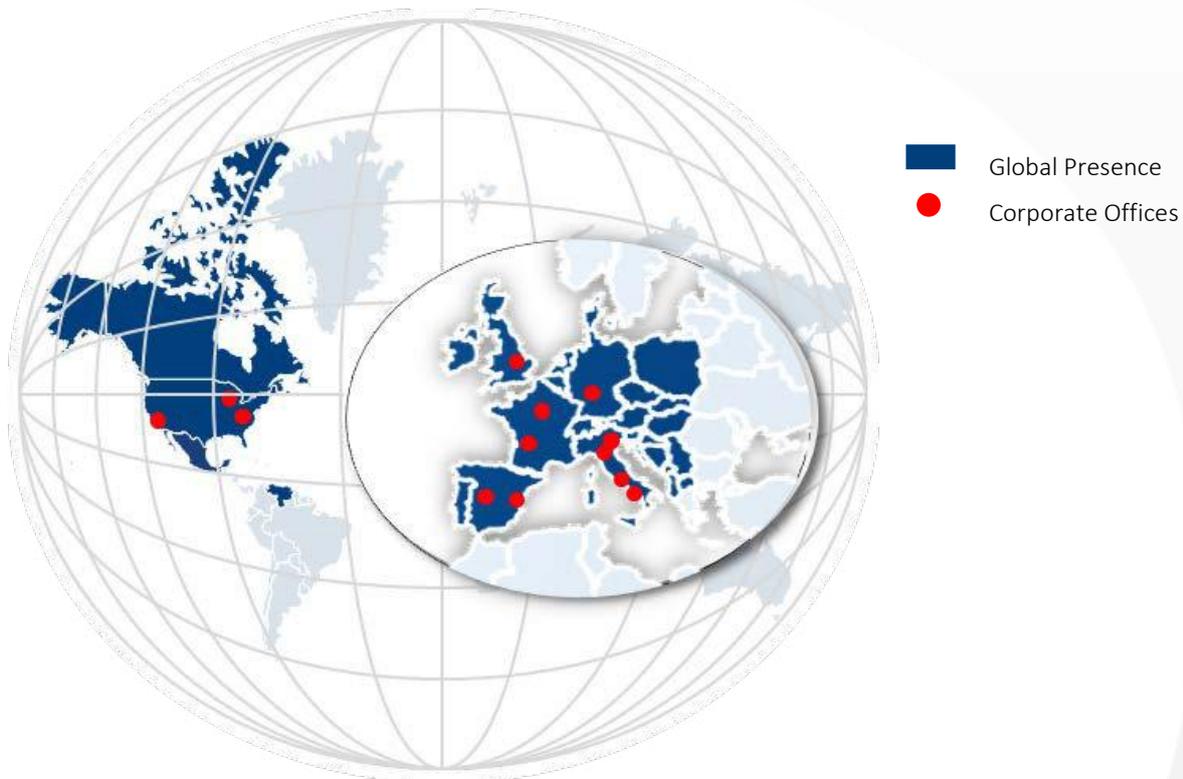
The following chart shows the Expert System Group organisation as at 31 December 2017:



The main events in the Group's growth in recent years were:

- the IPO on Borsa Italiana;
- the acquisition of two divisions operating in the semantic technology sector of the Spanish company ISOCO;
- the incorporation of CY4Gate S.r.l., in which our company holds a 24.5% stake, created from a joint venture with Italian company Elettronica S.p.A., a company operating in international cyber defence;
- the acquisition of Temis, a leading French company in text analytics solutions;
- the creation of an organisational structure in the United States targeted at meeting the growing requirements of private and public sector customers.

Thanks to the above, the Expert System Group now boasts a global presence and infrastructure, with fourteen offices located in Italy, Spain, France, Germany, United Kingdom and USA.



## **Operating conditions and business development**

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The Big Data Text Analytics sector Expert System is engaged in continues to retain considerable growth potential both at global level, where during 2017 it reached \$ 150.8 billion, and in the Italian market, where the € 1 billion threshold has been exceeded. This growth concerned the most varied business sectors, i.e. the banking and insurance sector, manufacturing, telco and media, PA and healthcare, service, large scale distribution and utility, proving how transversal the opportunity to seize promising results is compared to the reference economic activity.

The increased awareness of the opportunities offered by Big Data is in turn reflected in the planning of data driven strategies that target the predictive aspects and the automation of processes and services, and in consequent investments of an increasingly certain and measurable result, adopting new and specialised figures, such as data scientists, where necessary.

In this scenario, Expert System's activity on the technology front has resulted in a new release on the market of the new Cogito semantic technology engine, which further simplifies the development of advanced solutions for robotic process automation and information intelligence. Cogito 14, the latest version released by Cogito Labs, today offers customers the best semantic analysis technology through its key products, Cogito Studio and Cogito Discover.

Cogito is confirmed as the text analytics technology that forms the basis for all Expert System products, this time enhanced in the number of languages supported, which now includes Portuguese, Russian and Dutch. Cogito 14 therefore now supports 14 languages: Italian, English, Spanish, French, German, Portuguese, Russian, Korean, Chinese, Japanese, Arabic, Greek, Polish and Dutch.

Also note that the additional functions implemented included:

- Cogito Knowledge Graph, a rich knowledge base containing millions of concepts with their respective lexical formats, different properties and relationships useful to understanding and disambiguation of the meaning of the words and phrases contained in the texts. For this purpose, specific machine learning techniques are also used that help to enhance automatic understanding of the texts, unsupervised or with the supervision of experts in the field;
- Cogito API, which simplifies the development and integration of Cogito products into other platforms or pre-existing architectures, with obvious benefits in terms of implementation times.

Since February 2014 Expert System has been listed on the AIM Italia (Alternative Investment Market), i.e. the Borsa Italiana market dedicated to Italian small and medium enterprises with high growth potential. The strongly innovative nature of many businesses listed on this market has in the last few months benefited from a number of new regulatory provisions. To summarise:

- the introduction of IIPs (Individual Investment Plans) in the latest Stability Act. 70% of these new investment instruments must target the purchase of shares or bonds of Italian companies, of which 30% must be represented by SMEs, with tax exemptions envisaged under certain conditions on the capital gains realised on such investments;
- the subsidy envisaged for the investments in Innovative Small and Medium Enterprises (title achieved by Expert System on 3 August 2017, as described later in this report), which offers tax savings proportionate to the investments in the capital of these companies when certain conditions are met, including a minimum investment period of 3 years.

On 7 July 2017, by deed recorded by Notary Rolando Rosa (index no. 121989, folder 21233), the extraordinary shareholders' meeting resolved upon a divisible share capital increase

and/or the issue of convertible bonds for a maximum € 10,000,000 including share premium, through the issue of new ordinary shares without par value, with powers delegated to the Board of Directors pursuant to articles 2443 and 2420 ter of the Italian Civil Code.

The resolutions taken at the mentioned shareholders' meeting were thus implemented by the Board of Directors, which on 13/10/2017, as duly recorded by Notary Rolando Rosa (index no. 122232, folder 21411) decided to partially exercise powers delegated to it, resolving on a capital increase of a maximum total amount of € 4,990,000, through the issue of new ordinary shares optioned to shareholders, establishing, at the subsequent meeting of 08/11/2017, to issue maximum 3,718,654 ordinary shares of Expert System S.p.A..

The share capital increase was optioned to shareholders, assigning the option of subscribing 2 newly issued shares for every 15 shares held at the price of € 1.30 per share, of which € 0.01 allocated as share capital increase and € 1.29 to the share premium reserve.

The share capital increase decided by the Board of Directors on 13 October 2017 was fully subscribed, with the final subscription in December 2017 for a total value of € 4,834,250.20, including share premium; as a result of all of the above, the share capital of Expert System S.p.A. now totals € 317,497.11, subdivided into 31,749,711 ordinary shares without par value. On 13 December 2017, as duly recorded by Notary Rolando Rosa (index no. 122421, folder 21548), the Board of Directors resolved to further execute the powers assigned by the Extraordinary Shareholders' Meeting of 7 July 2017, increasing the share capital, against payment and divisible, by a maximum amount of € 4,252,300, establishing to offer 3,271,000 newly issued shares as part of a private placement to take place through the accelerated bookbuilding procedure, and to implement this issue with exclusion of the option right pursuant to art. 2441, par.5, of the Italian Civil Code, as this is to be exclusively reserved for "qualified investors" in Italy and "Institutional investors" abroad. Also in this case, the newly issued shares were offered at a subscription price of € 1.30 per share, of which € 0.01 allocated as share capital increase and € 1.29 to the share premium reserve.

Having acknowledged that demand exceeds supply, an increase was made on 15 December 2017, as duly recorded by Notary Rolando Rosa index no. 122440 folder 21560, to the increase previously resolved on 13 December 2017 for an additional € 910,000, establishing to issue a maximum number of 700,000 shares at the same conditions of the previous capital increases. Again on 15 December 2017, following the full subscription of the share capital increase of 13-15 December 2017, for a total value of € 5,162,300.00, including the share premium, the share

capital of Expert System S.p.A. rose to € 357,207.11, subdivided into 35,720,711 ordinary shares without par value.

As a result, the Board of Directors essentially fully executed the powers assigned to it by the extraordinary shareholders' meeting on 7 July 2017, renouncing, to this effect, the portion not exercised for a total of Euro 3,449.80.

This positive finding constitutes for Expert System the premise to further increase its commitment to reach the main development objectives of the business, which include consolidating the group's presence in international markets, both in Europe and in the United States.

With reference to other changes that concerned the share capital, it is also specified that on 28 June 2017, duly recorded by Notary Rolando Rosa (index no. 121949, folder 21215) and by the powers granted to the Board of Directors, the share capital increase was carried out in implementation of the Temis 2016-2020 Stock Grant Plan.

The stock grant plan envisages the free assignment to employees or directors of Temis S.A., now Expert System France S.A., of 978,967 shares.

The plan was implemented by the issue of 721,245 new shares and the remaining 257,722 shares through the assignment of treasury shares held by the company.

28 June 2017 saw the initial share capital increase in implementation of the Temis 2016-2020 Stock Grant Plan, which led to issue of the first tranche of 360,623 new shares through the free share capital increase of € 3,606.23, using funds for the same amount from the extraordinary reserve.

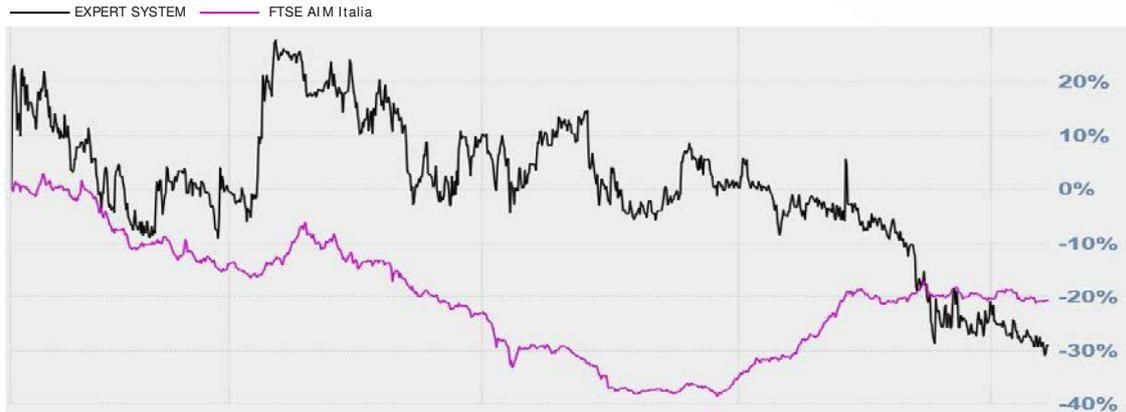
On the same date, again in implementation of the Temis 2016-2020 Stock Grant Plan, the company arranged the free-of-charge assignment to beneficiaries of 128,861 treasury shares, equal to 50% of the total value of the plan.

Finally, note that during the first period of exercise of the Expert System S.p.A. 2016-2018 warrants ("Warrant") between 1 October 2017 and 31 October 2017 included, 104 newly issued ordinary shares were assigned, according to a ratio of 1 ordinary share to every 4 Warrants exercised. Note that these Warrants were assigned free of charge to the subscribers of the share capital increase decided by the Board of Directors of Expert System S.p.A. on 13 July 2016 and fully subscribed, with the final subscription in September 2016, in the ratio of 1 Warrant to every new share subscribed.

The performance of the Expert System share as at 22 March 2018 is presented below:

Market	AIM Italia – MAC
Share capital	€ 357,207
Capitalisation	€ 47,415,672
Minimum parcel	1,000.00
Reference price	€ 1.325 – 22/03/2018 h 17.27.51
Official price	€ 1.3274 - 21/03/2018
1 month performance	- 2.57%
6 month performance	- 16.29%
1 year performance	- 26.59%

The chart below instead shows the share performance from the IPO (18/02/2014) to 22/03/2018. In particular, the chart compares the Expert System performance against that of the FTSE AIM Italia index (Source: [www.borsaitaliana.it](http://www.borsaitaliana.it)).



Similarly to previous years, the year 2017 again saw the consolidation of important partnerships and technological synergies, made possible by the extensive experience gained by Expert System in information management for rapidly creating high-value added solutions.

The partnership with Esri, a leader in geospatial solutions to support operating and decision-making processes, falls into this context. The integration of Esri’s ArcGIS platform for the management of geospatial and georeferenced data with Expert System’s Cogito semantic analysis technology, based on artificial intelligence algorithms, makes it possible to offer effective support to the intelligence analysts of any organisation in tactical and strategic analysis.

In the medical field, the versatile Cogito technology was chosen for the “OncoSNIPE®” programme, designed to give artificial intelligence support to the diagnosis and treatment of tumours with particular reference to processing data useful for assessing diseases. Some of the key aims of this project, in fact, will be to identify, analyse and correlate all information on patients resistant to tumour treatments so as to steer scientific research towards new and more effective therapies. Coordinated by the French company Oncodesign, specialising in biotechnologies for the pharmaceutical industry, the French business partners for this programme were Sword (an international company based in Lyons, specialised in digital services and consulting) and Acobiom (based in Montpellier, specialising in particular in the research of new biological markers), with involvement also of university hospitals and academic research institutes (Hôpitaux Universitaires of Strasbourg, Centre George François Leclerc in Dijon and Institut Paoli Calmettes in Marseilles).

In the medical area, the application of artificial intelligence to the vast quantity of data and documents created, offers the opportunity to manage in a prompt, accurate and complete manner all the information potentially useful for health. Health and well-being are among the

priorities of the research activities currently carried out by Expert System. In particular, among the medical and healthcare projects in progress in Expert System's Cogito Labs there is:

- S-Grouper, a tool that uses semantic analysis of discharge letters and other documents to support the enabling of automatic coding control processes in hospitals and helps to improve the quality of clinical governance administrative processes;
- TENECO - a TeleNeurosurgery Support System to memorise, classify, search and process clinical surgery and statistics and all patient data for care purposes (from hospital stay to final results, including any rehabilitation);
- the Pasteur project, based on a platform using Cogito to try to identify reliability indexes of medical content and indications published on the web without specific prior control of the sources.

As regards the development of advanced software for robotic process automation, an important partnership also began with Eudata, an innovative industrial group founded in Milan in 2006, operating in the Customer Engagement sector. This partnership was launched with the aim of maximising the effectiveness of customer-business interaction, with a view to combining forces to work alongside companies innovating their relations with customers, exploiting the potential of artificial intelligence in assistance, sales support and marketing. Through the integration of Cogito cognitive technology and the Eudata omnichannel suite, companies will have the opportunity to rapidly implement chatbots. These systems generate the shift from the model in which individuals adapt to computers to that where the computer adapts to individuals' expectations, with dual benefits: offering users new means of access to information of interest through automatic human-like dialogue, i.e. freely expressed as it would via chat; increasing the operational efficiency of companies, automating repeat activities that do not call for specific capacity or specialist skills (recovery of standard information, most common support needs, requests for quotes, common offers, etc.).

The offer of innovative services based on automatic voice assistants, able to improve the customer experience and considerably reduce the workloads of customer service departments, also forms the basis of the technological integration between Cogito and the speech recognition of the new technology partner, Cedat 85, operating for over 30 years and a leader in the voice recognition technology market. The intention is to offer systems for interaction with customers and users which, in the role of virtual agents or assistants, are not only able to find the information concerned more easily than in the past, but also know how

to immediately carry out the commands given. It is feasible to consider that this will open the door to new customer analytics opportunities, such as customer profile enhancement with identification of behaviour and new demands.

Cogito cognitive technology and its capacity for making the correspondence between demand and supply faster and more precise made possible the arrangement with APEC, the French employment agency, which will apply semantic analysis to the contents of job offers and CVs in the various selection stages. By applying Expert's semantics technology to the entire recruitment cycle, APEC intends to provide users of its proprietary search engine with more accurate and relevant results, automating the data management processes to correctly align job applications with job offers, and amongst others performing the following activities:

- identification of the duties involved in an offer;
- alignment of the know-how described in offers and applications;
- production of statistics on the type of employment, geographic distribution and other parameters.

The partnership agreement signed with Blue Prism, a global leader in System Integration services, is also of considerable importance. Using Expert System technology the partnership will simplify and further increase the adoption of artificial intelligence solutions.

The partnership will help the companies to accelerate the business transformation and innovation processes, particularly RPA (Robotic Process Automation). RPA is the leading field for mass adoption of artificial intelligence solutions, with prospects for further development and growth in this constantly expanding market. The main partnership segments to be developed include banking, insurance and automotive.

Also in this sector is a similar agreement signed with Sopra Steria, a European leader in Digital Transformation, which offers one of the most complete ranges of Consulting, Systems Integration, Software Development and Business Process Services available on the market at present. In this case, too, Expert System has allowed the new business partner to considerably improve the quality of services offered to its customers.

With regard to the enormous potential of cognitive solutions in the insurance sector, useful for automating complex business processes, combining a high degree of accuracy with lower and calculable implementation costs, note the global agreement signed with Zurich Insurance Ltd. Expert System's support will be provided for the automation and strategic innovation processes, making available all the benefits of Cogito artificial intelligence with short

implementation times and maximum efficiency, improving the quality of services provided by Zurich Insurance Ltd. to its customers.

Again in insurance, Expert System signed a global contract with the world leader of the specialised insurance market, Lloyd's of London, to support, with the Cogito cognitive technology, the automation, by transforming the business processes to support the needs of the stakeholders and allow to undertake the evolution linked to digital transformation in an effective manner, by automating the business processes and improving the customer experience.

As regards the financial sector, the strategic partnership with NominoData to support banks' anti-money laundering activities has been strengthened. Applying Cogito to the rich set of data made available by NominoData, intelligence gathering will be enhanced and will offer availability of even more complete results so as to increase the awareness and effectiveness of anti-money laundering activities, particularly in lending and insurance market organisations. NominoData, in fact, has an enormous amount of strategic data on financial crimes which, once analysed using Expert System's artificial intelligence tools will allow more complete and updated due diligence information to comply with business requirements.

Another important step made by Expert System to support the processes of digital transformation was the partnership with EIT Digital, the community created by EIT, European Institute of Innovation and Technology. In its capacity as EIT Digital partner, Expert System will undertake to actively participate in the initiatives of the community, making its experience available within the area of artificial intelligence and working in synergy with the other leading organisations of the sector, universities and research centres, as in the case of the excellent training and research pole of Povo di Trento, the main EIT Digital office in Italy.

In 2017 Expert System have earned various major recognitions, in particular:

- the inclusion again for 2017 in the "KMWorld 100 Companies that Matter in Knowledge Management" rankings, compiled by a group of sector experts and market analysts working together under the guidance of the prestigious US magazine KMWorld to select the best solutions worldwide offered by companies operating in Knowledge Management. For the third consecutive year, KMWorld, the key point of reference worldwide in the Knowledge Management sector, awards Expert System's innovation: the Cogito® cognitive technology is the "Trend-Setting Product of the

Year”.

The Trend-Setting Products of KMWorld aim to identify the best solutions for the management of the knowledge both in terms of innovation and creativity. KMWorld acknowledges the uniqueness of the intuitions behind the Cogito® technology and, especially, the ability to satisfy the business needs connected with transforming information into knowledge;

- the inclusion by the prestigious Forbes magazine in an article on the top ten best Artificial Intelligence solutions destined to change the near future, allowing unstructured data to be extracted and analysed to rapidly identify the information necessary to support business decision-making processes;
- helping its customer BNL to win the “ABI Award for Innovation in Banking Services”. Expert System technology, in fact, allowed BNL to provide its employees with an “internal customer support” service that optimises help desk activities by exploiting the potential of Cogito information management. Cogito’s capacity to automatically process language, correctly understanding the meaning of sentences, associated with a customised taxonomy created in partnership with the Innovation Team of BPI, the consortium of the BNP Paribas Group in Italy, ensured maximum analysis precision and pertinent responses, with a significant saving in terms of time and resources;
- the selection by the US-based Gartner, global leader in strategic consulting, research and analysis in the Information Technology field, for the first “2017 Insight Engines Magic Quadrant” dedicated to business insight search applications, i.e. particularly advanced solutions to combine search simplicity with the most sophisticated analysis needs, thereby allowing companies to mine strategic information from available big data;
- the qualification as Innovative SME supported by conspicuous R&D investments in Big Data Text Analytics and Cognitive Computing. As a result of this title, which recognised the company’s broad propensity towards technological innovation in developing its own business models, investors can benefit from the tax incentives offered by the 2017 Stability Act.

## **APPROVAL OF THE CONSOLIDATED FINANCIAL STATEMENTS**

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The consolidated financial statements as at 31/12/2017 were approved by the Board of Directors on 23 March 2018 and audited.

## OPERATING PERFORMANCE

### General financial performance

In the Euro area, the growth prospects have improved and allow an expansion in GDP to be estimated for the Euro system of around 2.3%, against inflation which in December 2017 stood at 1.4%; with the figure in mind, the Executive Board of the ECB recalibrated its monetary policy tools, however preserving the highly expansive monetary conditions which remain necessary for a lasting return of inflation at levels lower but close to 2%. On the whole, the good performance of the labour market and low inflation continue to support the available household income, encouraging private consumption which would provide a positive contribution to growth also in 2018.

The recovery of the international economic cycle strengthened in a context of expanding global trade; however note how the uncertainty concerning the future direction of economic policies in the advanced areas and international geopolitical factors still represent a risk factor for global growth.

Among the risks that affect this scenario, those linked to the rising global tensions or the greater uncertainty concerning economic policies in the various areas, remain important and could translate into increased volatility in the financial markets and in the risk premiums, negatively affecting the economy of the Euro area.

Although a general underlying weakness of inflation persists, the short-term growth prospects of the global economy are still favourable.

### Operating performance of the Group

The year ended as at 31/12/2017 recorded a negative result of € (8,339,127).

The table below shows the results achieved in the last two years in terms of the value of production, EBITDA, EBIT and pre-tax result.

CONSOLIDATED EXPERT SYSTEM GROUP			Main income statement figures	EXPERT SYSTEM S.P.A.		
FY 2016	FY 2017	CHANGE		FY 2016	FY 2017	CHANGE
29,553,097	32,807,555	11%	Value of production	16,790,322	19,254,068	15%
(2,245,314)	1,046,323	147%	Gross operating profit (EBITDA)	1,320,094	3,309,453	151%
(8,548,673)	(6,496,033)	24%	Operating result (EBIT)	(1,303,737)	34,556	103%
(8,125,531)	(8,339,127)	(3%)	Net profit (loss)	(1,202,777)	(1,071,519)	11%

The value of production, equal to € 32,807,555, grew by 11% compared to the previous year, ending with an amount equal to € 29,553.09. This increase, together with the reduction of the cost of operating materials and overheads (-6%) and the reduced growth in personnel costs (+4%) led to a sharp improvement in profit margins compared to the previous year, with an EBITDA of € 1,046,323 which records a significant increase compared to the negative figure of € 2,245,314 recorded in 2016.

The net result, negative for € 8,339.12 (negative for € 8,125.53 as at 31/12/2016) is less significant from the time that it discounts a growth in amortisation (+20%) strictly connected to the higher investments development activities and is affected by non-monetary components such as the valuation of balance sheet items in currencies other than the Euro which have a negative effect of € 1,721.55.

In order to provide a better outline of the performance and the operating result, the following tables provide a reclassification of the added value Income Statement, a reclassification of the financial Balance Sheet and the more significant financial statement ratios.

### Main income statement figures

The reclassified income statement of the Group is shown below (in Euro):

Consolidated Income Statement	31/12/2017	31/12/2016	Change
Sales revenues	26,136,230	23,367,938	2,768,292
Change in inventories	(527,733)	(1,169,763)	642,029
Own work capitalised	5,552,488	5,665,880	(113,392)
Sundry income	1,646,570	1,689,042	(42,472)
<b>Value of operating production</b>	<b>32,807,555</b>	<b>29,553,097</b>	<b>3,254,457</b>
Cost of operating materials and overheads	(12,451,604)	(13,312,302)	860,698
<b>Value added</b>	<b>20,355,951</b>	<b>16,240,795</b>	<b>4,115,156</b>
Personnel costs	(19,309,628)	(18,486,109)	(823,519)

<b>EBITDA</b>	<b>1,046,323</b>	<b>(2,245,314)</b>	<b>3,291,637</b>
Amortisation, depreciation and provisions	(7,542,356)	(6,303,359)	(1,238,996)
<b>EBIT</b>	<b>(6,496,033)</b>	<b>(8,548,673)</b>	<b>2,052,640</b>
Financial area result	(2,191,223)	(156,016)	(2,035,207)
<b>Ordinary profit</b>	<b>(8,687,256)</b>	<b>(8,704,689)</b>	<b>17,433</b>
Extraordinary area result	0	0	0
<b>Pre-tax result</b>	<b>(8,687,256)</b>	<b>(8,704,689)</b>	<b>17,433</b>
Income taxes	348,129	579,158	(231,029)
<b>Net profit (loss)</b>	<b>(8,339,127)</b>	<b>(8,125,531)</b>	<b>(213,596)</b>

The value of production was € 32,807,555 (€ 29,553,099 as at 31 December 2016), up 11%. Revenues net of changes in inventories equal € 25,608,496 recording an increase of 15% compared to 31 December 2016 equal to € 22,198,175.

The increase in personnel costs (+4%) is mainly due to costs of a non-recurring nature due to the reorganisation underway and partly linked to the addition of high standing managerial figures, also commercial, in particular in France and Germany in order to consolidate the company's position in Europe.

EBITDA is positive for € 1,046.32 (negative for € 2,245,314 as at 31 December 2016). EBIT was negative for € 6,496,033 (negative for € 8,548,672 as at 31 December 2016), after amortisation, depreciation and provisions of € 7,542,356 associated mainly with technology investments for € 4,102,807, fundamental in the highly innovative segment in which the company operates, and the amortisation of consolidation differences for € 2,250,010 arising from the recent acquisitions.

Financial management recorded a negative result of € 2,191.22 (€ 156,017 as at 31/12/2016), due mainly to the unfavourable performance of the dollar, which affected the adjustment of the financial statement values into dollars, mostly concerning loans to subsidiaries.

In terms of providing a better description of the company's profits, the table below outlines certain profitability ratios.

Profitability ratios	31/12/2017	31/12/2016
Net ROE	(0.3)	(0.33)
Gross ROE	(0.31)	(0.35)
ROI	(0.23)	(0.31)
ROS	(0.25)	(0.37)

### Main balance sheet figures

The Group's reclassified balance sheet as at 31/12/2017, compared with that as at 31/12/2016, is shown below (in Euro):

Consolidated Balance Sheet	31/12/2017	31/12/2016	Change
Net intangible fixed assets	16,944,056	18,372,463	(1,428,407)
Net tangible fixed assets	791,868	914,523	(122,655)
Equity investments and other non-current financial assets	3,826,254	3,270,381	555,873
<b>Fixed assets</b>	<b>21,562,177</b>	<b>22,557,366</b>	<b>(995,189)</b>
Short-term financial assets	4,583,074	4,153,074	430,000
Inventories	99,207	627,484	(528,276)
Receivables due from customers	12,384,149	10,232,837	2,151,312
Other receivables	6,018,231	8,444,881	(2,426,650)
Accrued income and prepaid expenses	582,304	1,003,638	(421,334)
<b>Short-term operating assets</b>	<b>23,666,965</b>	<b>24,461,914</b>	<b>(794,949)</b>
Trade payables	(2,224,541)	(2,698,583)	474,043

Payments on account	(869,024)	(2,247,323)	1,378,298
Tax and social security payables	(1,829,052)	(2,275,284)	446,232
Other payables	(2,583,753)	(1,962,195)	(621,558)
Accrued expenses and deferred income	(3,023,288)	(3,595,666)	572,378
<b>Short-term operating liabilities</b>	<b>(10,529,658)</b>	<b>(12,779,051)</b>	<b>2,249,393</b>
<b>Net working capital</b>	<b>13,137,307</b>	<b>11,682,863</b>	<b>1,454,444</b>
Employee severance indemnity	(1,876,192)	(1,670,520)	(205,673)
Tax and social security payables			
Accrued expenses and deferred income after 12 months	(3,574,759)	(3,640,000)	65,241
Other medium and long-term liabilities	(1,183,398)	(1,392,298)	208,900
<b>Medium-term liabilities</b>	<b>(6,634,350)</b>	<b>(6,702,818)</b>	<b>68,468</b>
<b>INVESTED CAPITAL</b>	<b>28,065,134</b>	<b>27,537,411</b>	<b>527,723</b>
Shareholders' equity	(19,275,808)	(16,437,209)	(2,838,599)
Net medium/long-term financial position	(14,682,546)	(15,251,917)	569,370
Net short-term financial position	5,893,220	4,151,714	1,741,506
<b>OWN EQUITY AND NET FINANCIAL DEBT</b>	<b>(28,065,134)</b>	<b>(27,537,411)</b>	<b>(527,723)</b>

Fixed assets, equal to € 21,562,177 (€ 22,557,336) saw a decrease of € 995,189, given that the increase in fixed assets, mainly relating to research and development activities for a net book value of € 1,126,174, were offset by higher amortisation of costs capitalised in previous years and those recognised on the consolidation difference, generated by the elimination of equity investments in subsidiaries against that of the corresponding shareholders' equities.

Concerning current business-related aspects, a reduction of € 794,949 was recorded in short-term operating assets. The most significant decrease of € 2,426,650 related to other

receivables is almost entirely offset by the increase in receivables due from customers equal to € 2,151,312. As at 31/12/17 the value of contract work in progress added to inventories decreased by 528,276 compared to 31/12/2016. Short-term operating liabilities decreased by € 2,249,393 due mostly to the payments on account decreasing by € 1,378,298. Net working capital is thus € 1,454,444 higher than in the previous year.

The table below shows certain financial statement ratios relating to both (i) the methods of financing medium/long-term investments and to the (ii) composition of sources of financing:

<b>Fixed asset funding ratios</b>	<b>31/12/2017</b>	<b>31/12/2016</b>
Fixed asset/equity margin	(2,286,370)	(6,120,161)
Fixed asset/equity ratio	0.89	0.73
Fixed assets/liabilities and equity margin	15,455,767	12,194,574
Fixed assets/liabilities and equity ratio	1.72	1.55

<b>Fixed assets/equity ratio of loans</b>	<b>31/12/2017</b>	<b>31/12/2016</b>
Liabilities due within 12 months (A)	12,882,242	15,402,657
Liabilities due after 12 months (B)	17,742,137	18,314,735
Own equity (C)	19,275,808	16,437,207
<b>Total debt ratio (A+B)/C</b>	<b>1.59</b>	<b>2.06</b>

The capital assets and related fixed assets to equity ratio express how the company manages to finance its fixed assets.

The fixed asset/equity margin and its associated ratio, which correlate the value of shareholders' equity with fixed assets (as quantified in the table above), provide us with information on the company's capacity (or not) to finance all fixed assets with its own equity.

<b>Shareholders' equity (A)</b>	<b>19,275,808</b>
Net intangible fixed assets	16,944,056
Net tangible fixed assets	791,868
Equity investments and other non-current financial assets	3,826,254
<b>Fixed assets (B)</b>	<b>21,562,177</b>

<b>Fixed asset/equity margin (A-B)</b>	<b>-2,286,370</b>
<b>Fixed asset/equity ratio (A/B)</b>	<b>0.89</b>

The negative result of the fixed asset/equity margin with the correlated ratio at less than one indicates that in order to meet its long-term financial commitments the company must, for the moment, seek third party financing (financial indebtedness).

The fixed assets/liabilities and equity margin and its related ratio instead also use medium/long-term liabilities as reference.

Shareholders' equity (A)	19,275,808
Net medium/long-term financial position (B)	14,682,546
Other medium and long-term liabilities (C)	1,183,398
Employee severance indemnity (D)	1,876,192
Fixed assets (E)	-21,562,177
<b>Fixed assets/liabilities and equity margin (A + B + C + D + E)</b>	<b>15,455,767</b>
<b>Fixed assets/liabilities and equity ratio (A + B + C + D)/(E)</b>	<b>1.72</b>

## Main financial figures

The net financial position as at 31/12/2017 is as follows (in Euro):

<b>Consolidated net financial position</b>	<b>31/12/2017</b>	<b>31/12/2016</b>	<b>Change</b>
Bank deposits	11,221,661	8,994,794	2,226,867
Cash at bank and in hand	3,029	68,146	(65,117)
Cheques	10,000		10,000
<b>Cash and cash equivalents</b>	<b>11,234,690</b>	<b>9,062,940</b>	<b>2,171,749</b>
<b>Current financial assets</b>	<b>34,402</b>	<b>1,308,046</b>	<b>(1,273,643)</b>
Bonds and convertible bonds (within 12 months)			

Payables due to shareholders for loans (within 12 months)			
Payables due to banks (within 12 months)	(3,910,091)	(5,046,595)	1,136,504
Payables due to other lenders (within 12 months)	(1,465,781)	(1,172,677)	(293,104)
Advances for overseas payments			
Short-term portion of loans			
Financial receivables			
<b>Short-term financial payables</b>	<b>(5,375,872)</b>	<b>(6,219,272)</b>	<b>843,399</b>
<b>Net short-term financial position</b>	<b>5,893,220</b>	<b>4,151,714</b>	<b>1,741,506</b>
Bonds and convertible bonds (after 12 months)	(5,000,000)	(5,000,000)	0
Payables due to shareholders for loans (after 12 months)			
Payables due to banks (after 12 months)	(7,846,031)	(8,595,385)	749,354
Payables due to other lenders (after 12 months)	(1,836,515)	(1,656,532)	(179,983)
Advances for overseas payments			
Long-term portion of loans			
Financial receivables			
<b>Net medium/long-term financial position</b>	<b>(14,682,546)</b>	<b>(15,251,917)</b>	<b>569,370</b>
<b>NET FINANCIAL POSITION</b>	<b>(8,789,326)</b>	<b>(11,100,202)</b>	<b>2,310,876</b>

The short-term net financial position increased consequently to the rise in cash and cash equivalents and to the decrease in bank debt.

## **THE ENVIRONMENT, PERSONNEL AND RISKS**

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Taking into account the company's social role, as also outlined in the document on the report on operations of the Consiglio Nazionale dei Dottori Commercialisti e degli Esperti Contabili (National Institute of Chartered Accountants), it is deemed appropriate to provide the following information on the environment and on personnel.

### **The Environment**

In the first half of the year there was no damage to the environment for which Expert System was ultimately declared guilty. During the year, no sanctions or penalties were imposed upon the company for environmental offences or damages.

On 30 June 2008, Expert System S.p.A. obtained ISO 9001:2000 certification.

The latest review of the ISO 9001:2008 certification was performed on 29 June 2017, reconfirming validity until 15 September 2018.

### **Personnel**

During the year there were no workplace fatalities for registered employees and no serious accidents occurred in the workplace causing serious or very serious injury to registered employees. Furthermore, there are no recorded charges concerning occupational diseases of employees or former employees, or mobbing proceedings.

During the year, Expert System also invested in staff safety in compliance with Italian Legislative Decree 81/08. In fact, all personnel were given training on the safety of workers and supervisors. In addition, refresher courses were also provided to first aid personnel and members of the fire safety team.

### **Description of the main risks and uncertainties to which the Group is exposed**

Pursuant to art. 2428 no. 1 of the Italian Civil Code, the main risks to which the Group is exposed are as follows:

*Risks associated with trade receivable collection times:* Expert System’s business activities are characterised by customer payment timing that cannot easily be determined and can occasionally be several months, also in relation to the type of assignment and the contingent general economic situation. Any lengthening of payment times by customers can lead to Expert System needing to finance the related current capital needs. Such situations can therefore have a negative effect on the Company’s income, equity and financial position. The above takes on further significance in consideration of the relevance of the trade receivables due from European public entities. These receivables can have longer and more difficult to predict collection times compared to receivables due from private customers. Although as part of its normal operations Expert System makes use of bank credit facilities, it cannot be ruled out at this time that there will be no positions difficult to collect.

*Risks associated with the internationalisation:* Expert System has initiated an internationalisation process in the hope that an appreciable part of its revenues can be generated from sales outside its domestic market, in Europe over the US market which represents an important area to be covered on both the public and private front. In this respect, Expert System could be exposed to risks typically associated with operating at international level, including those relating to changes in local economic conditions, policies, taxes and regulations together with risks associated with the complexity of conducting business in distant geographic areas, as well as those linked to changes in foreign exchange rates versus non-EU countries. Unfavourable events occurring in such areas could have negative effects on the Company’s business and growth prospects, and on its income, equity and financial position. The following table shows the exchange rates applied to translate the financial statements of the subsidiaries:

Currency	Exchange rate as at 31/12/2017	Average rate 2017
USD	1.1993	1.1293
CAN	1.5039	1.4644
GBP	0.88723	0.87615

*Risks associated with related party transactions:* Expert System has concluded commercial and financial transactions with related parties, and as part of its operations could continue to do so. The main relations with related parties refer primarily to commercial transactions such as

technical and/or sales consultancy, administrative services contracts and leases. The financial contracts instead refer mainly to loans disbursed by Expert System S.p.A. to Group companies. In particular, last March Expert System adopted an intercompany financing plan which envisages the parent company's disbursement to subsidiaries of loans of an amount sufficient to provide them with the funding necessary to meet their expense and investment commitments. The intercompany financing plan offers subsidiaries a simpler way to obtain funding on the market and therefore overall facilitates execution of the Group's business plan. All the transactions performed were at arm's length.

*Risks associated with the protection of intellectual property rights:* To protect corporate value, the Company has registered the Expert System and COGITO trademarks. COGITO has also been patented in the United States. Though the Company has implemented the necessary measures to protect its intellectual property rights, it cannot be excluded that in the future third parties could perform activities that violate such rights, with negative effects on the Company's and/or Group's business and growth prospects and on the income, equity and financial position of the Company and/or Group.

*Interest rate risk:* the interest rate risk management policy aims to limit this volatility, first and foremost through the identification of a balanced mix of fixed and floating rate loans, and also by using derivatives which limit the fluctuations in interest rates, whilst derivative instruments or similar are not generally used purely for trading purposes.

The company has signed the following derivative contracts:

a) CARIPARMA

- Derivative contract type: IRS no. 59746/2014, unlisted, signed on 15/01/2014, expiring 31/12/2018;
- Purpose: hedging;
- Transaction with no principal swap;
- Notional amount of the contract: € 1,200,000;
- Liability hedged: CARIPARMA mortgage no. 04 107 008852280000, originated for € 1,200,000, signed on 23/12/2013 and expiring on 31/12/2018.
- Notional amount at the reference date (31/12/2017): € 253,199;
- Amount of the liability hedged at the reference date (31/12/2017): € 253,199;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: negative mark to model fair value of € 2,006.57;

- fair value at the start of the hedge: zero

b) CARIPARMA

- Derivative contract type: IRS no. 65611/2017, unlisted, signed on 25/09/2017, expiring 30/01/2023;
- Purpose: hedging;
- Transaction with no principal swap;
- Notional amount of the contract: € 1,000,000;
- Liability hedged: CARIPARMA mortgage no. 0106917000000, originated for € 1,000,000, signed on 25/09/2017 and expiring on 30/01/2023.
- Notional amount at the reference date (31/12/2017): € 1,000,000;
- Amount of the liability hedged at the reference date (31/12/2017): € 1,000,000.
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: negative mark to model fair value of € 15,080.21;
- fair value at the start of the hedge: zero

c) BANCO BPM

- OTC derivative contract “Maximum rate with fractioned premium” ID 790526 F 00104961 D 00038973 signed on 24/07/2017 and expiring on 31/12/2022;
- Purpose: hedging;
- Transaction with no principal swap;
- Notional amount of the contract: € 400,000;
- Liability hedged: BANCO BPM mortgage no. 03703813, originated for € 400,000, signed on 24/07/2017 and expiring on 31/12/2022.
- Notional amount at the reference date (31/12/2017): € 400,000;
- Amount of the liability hedged at the reference date (31/12/2017): € 400,000.
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: negative mark to model fair value of € 3,837.38;
- fair value at the start of the hedge: zero

### **Organisation and management model pursuant to Italian Legislative Decree 231/2001**

Italian Legislative Decree no. 231 of 8 June 2001 introduced administrative liability of legal

entities, companies and associations with or without legal status into Italian law. This decree envisages the exemption from administrative liability for companies adopting effective and efficient organisation and management models suitable to preventing offences that could be committed by senior officers of the company.

Expert System S.p.A. decided to arrange the preparation of an Organisation and Management Model and a Code of Conduct, also to reflect the company's broader corporate policy, which specify the action and initiatives undertaken to sensitise all its personnel (from management to employees), external collaborators and partners in relation to transparent and fair company management, in compliance with current legal regulations and with the fundamental business ethics principles in pursuing the corporate purpose. In this context, through adoption of the Organisation and Management Model envisaged in Italian Legislative Decree 231/2001, Expert System S.p.A. intends to pursue the objective of making the existing set of rules and controls also compliant with the aim of preventing the offences indicated in the decree.

The Organisation and Management Model and the Code of Conduct were approved by the Board of Directors of Expert System S.p.A. on 21 December 2016.

Adoption of the model refers solely to the parent company Expert System S.p.A. as the law considers the group to be a single organisation only in economic terms. A group is not an entity and therefore cannot be considered the direct centre for attributing liability for an offence, and therefore cannot be classified as one of the entities indicated in article 1 of Decree 231.

The Code of Conduct, on the other hand, is applicable to Group companies as it expresses the general principles of company and corporate conduct that the Group accepts as its own and with which all employees, managers and directors are expected to comply. The Code of Conduct therefore has a different reach than the Organisation and Management Model, as the Model responds to specific provisions of the Decree, whilst the ethics principles contained in the Code of Conduct are the basic rules of conduct for the lawful exercise of business activities.

The Organisation and Management Model was developed around the real situations typical of the company's operations, i.e. real activities and functions of the company and consequently real risks of the related potential offences.

For each department in which an underlying risk situation was found to exist, one or more protocols were defined for decision-making and operations, containing the rules to be followed when conducting activities. The protocols draw inspiration from the rule of ensuring

that the various steps in the decision-making process are documented and verifiable, wherever possible to trace the reasons behind the decision.

In particular, suitable procedures were defined to prevent the following offences:

- offences against P.A. and its assets;
- computer crimes and unlawful data processing;
- organised crime;
- falsification offences and industry and trade-related criminal offences;
- corporate offences;
- offences for the purpose of terrorism or overthrow of democratic order;
- criminal offences against the individual;
- market abuse offences;
- offences in violation of occupational health and safety regulations;
- anti-money laundering and receiving stolen goods;
- copyright violation offences;
- offences related to fraudulent statements to judicial authorities;
- environmental offences;
- offence of employing individuals without a valid residence/work permit.

Exemption from administrative liability as governed by article 6.1 of Italian Legislative Decree 231/2001 envisages the setup within the entity of a Supervisory Body as an element of fundamental importance. This Body has independent powers of initiative and control, with the duties of supervising the operations of and compliance with the Model and verifying its updating by the Board of Directors.

The Expert System S.p.A. Supervisory Body has three members: one internal and two external. All the members have proven expertise and professionalism. The presence of the internal member meets the requirement, from the outset, of giving the Supervisory Body immediate and in-depth knowledge of the entity's structure and its business organisation based on actual company operations.

This solution was considered the most suitable, based on the characteristics of the organisational structure, to guaranteeing the effectiveness of controls institutionally expected of the Supervisory Body and compliance with the related provisions in the recently approved Confindustria Guidelines.

In order to ensure the necessary stability and continuity of the Body's actions, it is envisaged that members hold office for a period of 3 years from the date of appointment.

It was also decided that the appointment, and termination if necessary, of the Supervisory Body should be the responsibility of the Board of Directors, which should make such arrangements in full compliance with the law and also on the basis of recommendations in the Confindustria Guidelines.

## **DEVELOPMENT ACTIVITIES**

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The ongoing investments in research and development activities is a key element in the Expert System strategy and it is necessary to remain state of the art in the cognitive technology field applied to unstructured data, therefore being able to satisfy the growing customer demand and retain its competitive advantage for customers. The costs incurred for these activities were capitalised, also within the context of certain multi-year national and international research projects that have seen the company's involvement. These activities involved the Cogito semantics platform and the products that use the platform to address the most common cases of customer usage.

As regards the development tools used to customise the projects, the greatest efforts focused on the inclusion and fine-tuning of machine learning/deep learning approaches, the enhancement of functions for the knowledge graph management (Sensigrafo) and completion of the integration with the components of the technology stack deriving from acquisition of the current French subsidiary.

Other sources of major research during the year 2017 included:

- implementation of a new series of summary views of cognitive analysis performed by Cogito;
- development of new reporting functions integrated in the product Cogito Intelligence Platform;
- completion of the new link for Microsoft Sharepoint;
- completion of version 1.3 of Analyst WorkSpace, which integrates the new functions of data analysis and editing by analysts;
- development of a new version of Cogito Answers;
- Dutch semantic implementation and integration in the current version in Cogito 14.2;

- restructuring and expansion of the knowledge graph for Korean, Japanese and Portuguese;
- integration of hybrid techniques of machine learning within Cogito 14.2
- development of a new version of the analysis workflow for process automation projects.

## **TREASURY SHARES**

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As at 31/12/2017, the parent company Expert System S.p.A. held 141,139 treasury shares. The change compared to the 270,000 treasury shares held as at 31/12/2016 is attributable to the assignment of 128,861 treasury shares following the maturity on 28/06/2017 of the first tranche of the Temis 2016-2020 Stock Grant Plan, already approved by the Shareholders' Meeting of 28/06/2016.

## EXPLANATORY NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT 31/12/2017

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### FORM AND CONTENT OF THE FINANCIAL STATEMENTS

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The consolidated financial statements as at 31/12/2017, comprising the balance sheet, income statement, cash flow statement and explanatory notes, have been drawn up in compliance with Italian Legislative Decree No. 127/1991 supplemented, with regard to the aspects not specifically envisaged by the decree, by the national accounting standards published by the Italian Accounting Body (OIC), adjusted following the amendments introduced by Italian Legislative Decree 139/2015 and, in the absence thereof, by those of the International Accounting Standards Board (IASB) and the Financial Accounting Standards Board (FASB); they are accompanied by the Report on Operations.

They are also accompanied by the following documents:

List of the companies included in the consolidated financial statements and of the equity investments:

- Companies consolidated line-by-line (pursuant to art. 26);
- Other equity investments in subsidiaries and associates;

Statement of reconciliation between shareholders' equity and loss for the year of the parent company and the corresponding consolidated balances.

The amounts are expressed in units of Euro.

The financial statements of the companies included in the scope of consolidation have been drawn up by the respective management bodies on the basis of the accounting standards mentioned above.

### **Exceptions**

No exceptional cases were identified that required recourse to the exceptions set forth under art. 29, sections 4 and 5 of Italian Legislative Decree No. 127/1991.

### **Transposition of Directive 34/2013/EU**

With reference to the financial statements for the years starting from 1/1/2016, Legislative Decree no. 139 of 18/08/2015 (so-called “financial statement decree”), published in the Official Gazette no. 205 of 4.9.2015, issued to implement Directive EU no. 34 of 26/6/2013, amended the Italian Civil Code with the aim of aligning the provisions contained therein on the regulation on the financial statements of corporations to the new EU provisions.

The above mentioned directive replaced the EU regulation in force with the purpose of improving the extent of information provided by the accounting document and start a process of simplification of the regulation that governs the preparation and publication of the financial statements.

In this context of reform, also the Italian Accounting Body (OIC), in compliance with the institutional purposes set by law, reviewed 20 accounting standards, which are used with regard to the practical aspects of the new regulatory structure.

The amendment to the financial statements of corporations concerned in particular:

- the documents that make up the financial statements;
- the accounting policies;
- the content of the Balance Sheet and the Income Statement;
- the measurement criteria;
- the content of the explanatory notes.

### **Scope of consolidation - Consolidation and translation principles**

The consolidated financial statements comprise the financial statements of EXPERT SYSTEM SPA and of the foreign companies over which it directly or indirectly exercises control as at 31/12/2017 (art. 30 Legislative Decree no. 127/91).

The assets and liabilities of the consolidated companies are included on a line-by-line basis. The book value of the equity investments held by the parent company and by the other companies included in the scope of consolidation is eliminated against the related shareholders' equity. The difference between the acquisition cost and the shareholders' equity at current value of the investee companies as of the date control is acquired is distributed, where possible, to the assets and liabilities of the investees, net of deferred taxes. Any remaining difference, if positive and if the recognition requirements of OIC 24 are met, is recognised in the item "Goodwill" under intangible fixed assets.

The remaining difference that cannot be allocated to asset and liability items or to goodwill is recorded in item 'B14 Sundry operating expenses' in the income statement.

Goodwill is amortised on the basis of a useful life estimated at 5 years, taking into account all available information to estimate the period in which the economic benefits will be achieved. Expert System considered it appropriate to exclude ADMANTX SPA, with headquarters in Naples, which the Group directly controls, and ADMANTX INC with headquarters in the USA, which the Group indirectly controls. Both companies provide semantic solutions for the advertising market, offering advertisers software that is able to automatically determine which ads are most suitable for advertising on a given website.

The equity investment in ADmantX S.p.A. as at 31/12/2017 is not considered functional with regard to the group's objectives and, in fact, scouting activities have been underway via a specialised advisor for the purpose of identifying a strategic partner, of an industrial and/or financial nature, to whom a significant or total holding in the company may be transferred, which permits ADmantX to more fully express its potential on a market such as that of ADTech which has features and methods very different from the Expert System business model.

The financial statements of the foreign companies are translated into Euro according to the following criteria:

- the assets and liabilities at the exchange rate in force as of the period end date;
- the income and expenses by applying the average of the period exchange rates;
- the shareholders' equity components at the rate in force in the related formation period.

The exchange differences deriving from the conversion of the closing shareholders' equity using the original formation exchange rates with respect to those in force as of the balance sheet date are booked directly to shareholders' equity, together with the differences between the economic result expressed using the average exchange rates and the economic result

expressed in Euro using the exchange rates in force as of the end of the period to the item “Translation differences reserve”, included under the item “Other reserves”.

The payable and receivable items and those concerning costs and revenues between the companies included in the scope of consolidation, are eliminated. In detail, the gains and losses deriving from transactions between Group companies not yet realised vis-à-vis third parties are eliminated, if significant.

The annual financial statements of the individual companies approved by the shareholders’ meeting or drawn up by the Board of Directors for approval, have been reclassified and adjusted if necessary to align them with the accounting standards adopted by the Group. For companies with year-end dates other than that for the consolidated financial statements, specific interim reports are prepared.

#### **Changes in the scope of consolidation**

The scope of consolidation has not changed compared to the previous year.

### **MEASUREMENT CRITERIA**

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The measurement criteria adopted for the drafting of the consolidated financial statements are in line with those used by the parent company, supplemented where necessary by the accounting standards adopted for specific consolidated financial statement items.

The measurement of the individual items is carried out on a prudent basis and with a view to the business as a going-concern, and taking into account the economic function of the asset and liability elements on the basis of the principle of prevalence of substance over form.

The measurement criteria have remained unchanged with respect to the previous year.

In particular, the following measurement criteria were adopted.

#### **Intangible fixed assets**

Intangible fixed assets are recognised, up to the recoverable value, at purchase or production cost, inclusive of any accessory charges, and are amortised systematically in relation to the residual possible useful life, possibly written down if as at the year end date the estimated recovery value of the fixed assets is permanently lower than the cost.

Consequently to the amendments made by Legislative Decree 139/2015 to the statements and the consequent new edition of Accounting Standard OIC 17 – Consolidated Financial Statements and Equity Method, item "B.I.5bis - Consolidation difference" was eliminated and this difference was reclassified, both in the closing consolidated financial statements and in the previous one, in item "B.I.5 - Goodwill".

### **Tangible fixed assets**

Tangible fixed assets are recorded at the date of transfer of the risks and benefits associated with the assets acquired and recognised, up to the recoverable value, at purchase or production costs net of the related accumulated depreciation, including all the costs and accessory charges directly attributable.

The cost is revalued in accordance with monetary revaluation laws and, in any event, does not exceed the market value.

The cost of the fixed assets whose use is limited over time is systematically depreciated each year on the basis of the economic-technical rates established in relation to the residual useful life.

In the event that, irrespective of the depreciation already recognised, permanent losses in value (impairment) are registered, the fixed assets are written down in relation to the residual useful life. If the reasons for the write-downs no longer exist in subsequent years, the original value is written back. Fixed assets in progress and payments on account to suppliers are recorded under the assets on the basis of the cost incurred and/or the payment on account made inclusive of the directly attributable costs.

### **Equity investments**

Equity investments are recognised at purchase and/or subscription cost, inclusive of accessory charges, and are written down in the presence of impairment losses.

### **Debt securities**

Debt securities are recognised at the time of delivery of the security and classified as non-current assets or current assets, depending on their allocated use.

### **Investment securities**

Listed and unlisted non-current debt securities are measured individually, assigning the

specific cost incurred to each security.

### ***Current securities***

Securities which do not represent fixed assets are recognised at purchase cost or estimated realisable value taken from market trends, whichever is the lower.

### **Inventories**

Contract work in progress is measured on the basis of the percentage of completion criterion: costs, revenues and the job profit are recognised on the basis of the progress of production activities. For the application of this criterion the hours worked method is adopted.

### **Derivative financial instruments**

Derivative financial instruments are recognised at fair value, corresponding with the market value, if any, or with the value obtained from measurement models and approaches that ensure a reasonable approximation of the market value. Financial instruments for which these methods could not be applied are measured on the basis of purchase price.

The present value is recorded among balance sheet assets in a specific item of non-current financial assets or current assets, depending on the allocated usage, or among liabilities in a specific item under provisions for risks and charges.

The cash flow hedges have a balancing entry in a shareholders' equity reserve or, for the ineffective portion, in the income statement.

### **Receivables**

Receivables are recorded as non-current assets or as current assets on the basis of their allocated use/source compared to the core business.

Receivables not measured using the amortised cost criterion are recognised at their estimated realisable value based on the debtors' solvency situation and the historical evolution of losses on receivables.

The receivables are recognised at estimated realisable value via allocations to the bad debt provision, recorded as a direct deduction from the asset and determined in relation to the risk of loss emerging from specific analysis of the individual positions and in relation to the past performance of the losses on receivables, as well as the country risk.

### **Cash and cash equivalents**

Cash and cash equivalents at year end are valued at nominal value.

### **Accruals and deferrals**

Accrued income and prepaid expenses, and accrued expenses and deferred income are recognised on an accruals basis.

Accrued income, classed as receivables for the year, were measured at their estimated realisable value.

Accrued expenses, classed as payables, were measured at nominal value.

### **Provisions for risks and charges**

Provisions for risks and charges are set aside to cover losses or payables which are certain or likely to exist but, in respect of which, the amount or date of occurrence cannot be determined at year-end. The provisions reflect the best possible estimate on the basis of the elements available.

The pension provision is established to cover the commitments accrued at period end vis-à-vis those with the right to a pension.

The provision for taxation includes the deferred tax liabilities associated with consolidation adjustments, when the effective manifestation with regard to one of the subsidiaries is probable.

### **Employee severance indemnity**

This reflects the liability, subject to revaluation by means of specific indices and net of the advance paid out, accrued by all the employees of the Group at year end, in compliance with the provisions of the law and current employment agreements.

### **Payables**

The company opted not to apply the amortised cost criterion to current payables (due in less than 12 months) and to other payables when the difference between the original value and value at the due date is negligible, rendering the application of this criterion immaterial.

Furthermore, no account was taken of the 'time factor' and payables due beyond 12 months were not discounted as the difference between the effective interest rate and the market rate

is immaterial.

Payables not measured using the amortised cost criterion are recognised at their nominal value.

### **Criteria for the translation of amounts stated in foreign currency**

Monetary assets and liabilities outstanding at the end of the year, originally expressed in currencies of countries not complying with the Euro, are expressed in the financial statements at the exchange rate in force at the end of the period. Gains and losses on the translation of the receivables and payables mentioned above using the exchange rate as of the balance sheet date are respectively credited and charged to the income statement.

Assets and liabilities in non-monetary currency are recognised at the exchange rate in force at the time of purchase.

### **Costs and revenues**

These are stated on a prudent basis in accordance with the accruals principle.

### **Income taxes for the year**

Current income taxes are recognised, for each company, on the basis of the estimate of the taxable income in compliance with the rates and current provisions as of the period end date in each country, taking into account any applicable exemptions and the tax credits possible due.

Prepaid and deferred taxes are calculated on the temporary differences between the value assigned to an asset or liability in the financial statements and the corresponding values recognised for tax purposes, on the basis of the rates in force at the time the temporary differences will reverse. Prepaid taxes are only recognised if reasonable certainty exists with respect to their future recoverability.

## **INFORMATION ON THE BALANCE SHEET**

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### **Intangible fixed assets**

Intangible fixed assets amount to € 16,944,057 (€ 18,372,465 in the previous year).

The breakdown and the changes in the individual items are presented as follows:

	Costi di impianto e di ampliamento	Costi di sviluppo	Diritti di brevetto industriale e diritti di utilizzazione delle opere dell'ingegno	Concessioni, licenze, marchi e diritti simili	Avviamento	Altre immobilizzazioni immateriali	Immobilizzazioni in corso	Totale immobilizzazioni immateriali
Valore di inizio esercizio								
Costo	1.728.297	23.701.613	1.125.041	19.052	14.380.186	38.464		40.992.653
Ammortamenti (Fondo ammortamento)	554.604	15.184.542	1.068.349	14.463	5.761.926	36.304		22.620.188
Svalutazioni	0	0	0	0	0	0		0
Valore di bilancio al 31/12/2016	1.173.693	8.517.071	56.692	4.589	8.618.260	2.160	-	18.372.465
Variazioni nell'esercizio								
Incrementi per acquisizioni	540.759	5.205.350					20.798	5.766.907
Riclassifiche								
Decrementi per alienazioni e dimissioni	50.200		1.175					51.375
Ammortamento dell'esercizio	444.371	4.102.807	27.630	729	2.607.502	1.575		7.184.613
Altre variazioni	10.697	-23.631	6.344					-6.589
Totale variazioni	56.886	1.126.174	-22.460	-729	-2.607.502	-1.575	20.798	-1.428.408
Valore di fine esercizio								
Costo	2.218.856	28.906.963	1.123.866	19.052	14.380.186	38.464	20.798	46.708.185
Ammortamenti (Fondo ammortamento)	988.277	19.263.719	1.089.634	15.192	8.369.428	37.879	0	29.764.128
Valore di bilancio al 31/12/2017	1.230.579	9.643.245	34.232	3.860	6.010.758	585	20.798	16.944.057

## Goodwill

Goodwill, recognised for € 6,010,757 net of amortisation, includes the following values:

- € 584,885, net of € 877,327 amortisation, deriving from the book value of the subsidiary Expert System Iberia S.L.U. and generated by the acquisition of the business unit of Isoco;
- € 925,852, net of € 708,648 amortisation, deriving from the book value of the subsidiary Expert System France S.A. (arisen when and in relation to which transaction).

The residual € 4,500,021 represents the consolidation difference generating from the elimination of the book value of the equity investments of the Parent Company in the subsidiaries and the corresponding portion of the shareholders' equity at the time of the first consolidation, net of amortisation.

The consolidation difference is recognised under intangible fixed assets and is amortised on a straight-line basis over a period of five years.

In particular, the total of € 4,500,021 was calculated as follows:

- € 3,389,225 (net of € 5,083,837 amortisation) from the consolidation of the subsidiary Expert System France S.A.;

- € 55,156 (net of € 82,735 total post-acquisition amortisation) from the consolidation of the subsidiary Expert System Iberia S.L.U.;
- € 1,055,640 (net of € 1,583,459 amortisation) from the consolidation of the indirect subsidiaries held by the sub holding Expert System France S.A.

Information is provided below on the most significant changes during the year:

- the increase in “Start-up and expansion costs” of € 540,759 is mainly associated with the capitalisation of:
  - expense for € 321,161 incurred for the share capital increase implemented during the year by Expert System S.p.A.;
  - start-up costs for € 171,155 incurred by Expert System USA Inc. for activities required to obtain the necessary certification to operate in the US Federal market.
- the increase in “Development costs”, totalling € 5,205,350, can be broken down as follows:
  - € 3,225,947 as the capitalisation carried out by the parent company of costs relating to employees and costs for external consultancy used in development, illustrated in detail in the explanatory notes of Expert System S.p.A.;
  - € 561,152 as the development costs of the subsidiary Expert System Iberia S.L.U.;
  - € 1,499,738 as the development costs of the subsidiary Expert System France S.A.;
  - € 81,487 as the negative effect of the exchange adjustment as at 31 December 2017 of the development costs of the subsidiary Expert System Enterprise Corp, which have changed compared to 31 December 2016.

In relation to the matters laid down by art. 38.1, letter d) of Italian Legislative Decree No. 127/1991, the breakdown of the start-up and expansion costs and development costs is illustrated in the following tables.

### Breakdown of start-up and expansion costs:

	Balance at start of the year	Increases in the year	Amortisation in the year	Other decreases	Total changes	Balance at end of the year
establishment/article of association amendment costs	80,876	10,697	12,343	50,200	(51,846)	29,030
start-up costs	652,435	219,599	184,467		35,131	687,566
extraordinary transaction costs	685		685		(685)	-
Admission to stock market listing	439,698	321,161	246,875		74,285	513,983
<b>Total</b>	<b>1,173,694</b>	<b>551,457</b>	<b>444,371</b>	<b>50,200</b>	<b>56,886</b>	<b>1,230,580</b>

The costs recorded are reasonably correlated to long-term benefit over several years, and are systematically amortised in relation to their residual useful life.

The item “Other intangible fixed assets”, which includes residual balances which cannot be classified in the previous items, amounts to € 585 (€ 2,160 in the previous year), and is made up as follows:

	Balance at start of the year	Changes in the year	Balance at end of the year
Substitute tax on loans	2,160	(1,575)	585
<b>Total</b>	<b>2,160</b>	<b>(1,575)</b>	<b>585</b>

### Tangible fixed assets

Tangible fixed assets amount to € 791,868 (€ 914,522 in the previous year).

The breakdown and the changes in the individual items are presented as follows:

	Land and buildings	Plant and machinery	Industrial and commercial equipment	Other tangible fixed assets	Total tangible fixed assets
Balance at start of the year					
Cost	456,980	218,291	1,558	2,183,353	2,860,182
Depreciation (Accumulated depreciation)	83,156	201,001	1,558	1,659,945	1,945,660
Book value as at 31/12/2016	373,824	17,290		523,408	914,522
Changes in the year					
Disposals				19,861	19,861
Increases due to purchases				48,619	48,619
Depreciation in the year	11,087	6,148		202,671	219,907
Other changes					
Total changes	(11,087)	(6,148)		(173,913)	(191,149)
Balance at end of the year					
Cost	456,980	218,291	1,558	2,212,112	2,888,941
Depreciation (Accumulated depreciation)	94,243	207,149	1,558	1,794,123	2,097,073
Book value as at 31/12/2017	362,737	11,142		417,988	791,868

The item "Other assets", which includes the residual values which cannot be classified in the

previous items, amounts to € 417,988 (€ 523,408 in the previous year) and breaks down as follows:

	Balance at start of the year	Changes in the year	Balance at end of the year
Office furniture	164,581	(38,537)	126,044
Electronic office machines	278,683	(45,650)	233,033
Motor vehicles	6,010	(4,007)	2,003
Ordinary office machines	24,325	(10,700)	13,625
Signage	3,690	(540)	3,150
Mobile phones	4,694	1,706	6,400
Office furniture and fittings	41,425	(7,692)	33,733
<b>Total</b>	<b>523,408</b>	<b>(105,420)</b>	<b>417,988</b>

#### **Non-current financial assets - Equity investments, other securities and derivative financial instruments**

The equity investments not included in the scope of consolidation amounted to € 308,404 (€ 308,404 in the previous year).

Other securities classed as non-current financial assets amount to € 85,952 (€ 81,388 in the previous year).

The breakdown and the changes in the individual items are presented as follows:

	Equity investments in associates	Equity investments in other companies	Total equity investments	Other securities
Cost	251,266	57,138	308,404	81,388
Book value as at 31/12/2016	251,266	57,138	308,404	81,388
Changes in the year				
Increases due to purchases				4,564
Total changes				4,564
Cost				
Book value as at 31/12/2017	251,266	57,138	308,404	85,952

Receivables due from subsidiaries and other equity investments listed in the above tables, included among non-current financial assets, are recognised at a value not higher than their fair value.

Below is information on equity investments in associates:

Name	Italian city or Foreign country	Tax code (for Italian companies)	Share capital in €	Profit (Loss) previous year in €	Shareholders' equity in €	Stake held in €	% held	Book value or corresponding receivable
CY4Gate S.r.l.	Rome	13129151000	300,000	(885,544)	385,774	73,500	24.50%	251,266
<b>Total</b>								<b>251,266</b>

With reference to the equity investment in the associate CY4Gate S.r.l., on 02/02/2018, as agreed before the Notary Elena with Offices in Formello (Rome), the associate resolved, pursuant to art. 2482 bis of the Italian Civil Code, the reduction of the share capital from € 300,000 to € 231,443.52, subsequently establishing to increase said share capital by € 89,556.48 in total, to € 321,000, against payment and with the issue of new equity investments to be offered to the shareholders proportionally to the stakes they already hold pursuant to art. 2481 bis first paragraph of the Italian Civil Code, with premium reserve of € 3,910,443.52. Having Expert System S.p.A. waived the subscription right granted to it on the capital increase resolved, the stake has decreased to 17.66%.

The breakdown of the value of equity investments in other companies is as follows:

Description	Book value
Okkam S.r.l.	1,000
Conai	5
ICT Sud	133
Confidimpresa	5,000
Distretto Tecnologico Trentino S.c.a.r.l.	1,000
Buzzoole Holdings Limited	50,000
<b>Other equity investments in other companies</b>	<b>57,138</b>
<b>Total</b>	<b>57,138</b>

### Non-current financial assets - Receivables

Receivables classed as financial assets amount to € 733,823 (€ 701,809 in the previous year).

The breakdown and the changes in the individual items are presented as follows:

	Importo nominale iniziale	Fondo svalutazione iniziale	Valore netto iniziale	Accantonam enti al fondo svalutazione	Utilizzi del fondo svalutazione	(Svalutazioni) /Ripristini di valore	Altri movimenti incrementi/ (decrementi)	Importo nominale finale	Fondo svalutazione finale	Valore netto finale
Verso imprese collegate esigibili oltre esercizio successivo	701.809	0	701.809	0	0	0	32.014	733.823	0	733.823
<b>Totale</b>	<b>701.809</b>	<b>0</b>	<b>701.809</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>733.823</b>	<b>0</b>	<b>733.823</b>

### Current assets - Inventories

Inventories included under current assets amount to € 99,207 (€ 627,483 in the previous year).

The breakdown and the changes in the individual items are presented as follows:

	Balance at start of the year	Change during the year	Balance at end of the year
Raw materials and consumables	8157	-8,157	-
Contract work in progress	619,326	-520,119	99,207
<b>Total inventories</b>	<b>627,483</b>	<b>-528,276</b>	<b>99,207</b>

### Current assets - Receivables

Receivables included under current assets amount to € 21,100,454 (€ 20,856,496 in the previous year).

The company opted:

- not to discount the receivables as the effective interest rate is not significantly different from the market interest rate;
- not to apply the amortised cost criterion to receivables due in less than 12 months;
- not to apply the amortised cost criterion as the transaction costs, fees and all other differences between the original value and value at the due date are negligible.

Bad debt provision comprises:

- € 150,180 of the bad debt provision set up in the parent company;
- € 27,225 of the bad debt provision set up in the subsidiary Expert System Iberia SLU;
- € 24,043 of the bad debt provision set up in the subsidiary Expert System France SA;
- € 22,930 of the bad debt provision set up in the subsidiary Expert System Enterprise Corp;

- € 3,197 of the bad debt provision set up in the subsidiary Expert System Deutschland GmbH.

The breakdown of the individual items is as follows:

	Within 12 months	After 12 months	Total nominal value	(Provisions for risks/bad debt provision)	Net value
Due from customers	12,611,724	0	12,611,724	227,575	12,384,149
Due from subsidiaries	33,982	26,787	60,768	0	60,768
Due from associates	34,831	-	34,831	0	34,831
Tax receivables	1,428,438	-	1,428,438		1,428,438
Prepaid taxes	464,391	1,677,790	2,142,181		2,142,181
Other receivables	4,056,590	993,497	5,050,086	0	5,050,086
<b>Total</b>	<b>18,629,955</b>	<b>2,698,074</b>	<b>21,328,029</b>	<b>227,575</b>	<b>21,100,454</b>

Receivables due from subsidiaries, amounting to € 60,768, are receivables due from the subsidiary ADmantX S.p.A., excluded from the scope of consolidation as explained in the preamble.

Receivables due from associates, amounting to € 34,831, are composed of trade receivables due from the associate CY4Gate S.r.l.

Other receivables amount to € 5,050,086 (€ 7,478,549 in the previous year).

The breakdown and the changes in the individual items are presented as follows:

	Opening value	Change	Closing value
Security deposits	168,638	78,924	247,562
Payments on account	152,317	6,891	159,208
Receivables for research project grants	6,256,418	(2,163,805)	4,092,614
Receivables due from factoring companies	355,615	68,375	423,990
Other receivables	545,561	(418,847)	126,713
<b>Total</b>	<b>7,478,548</b>	<b>(2,428,462)</b>	<b>5,050,086</b>

Receivables for research project grants due within no later than 12 months refer to all receivables accrued as at 31/12/2017, relating to sums that the company has to collect in that respect. Details of receivables for research project grants are presented below by company:

	Expert System S.p.A.	Expert System Iberia	Expert System France
Receivables for project grants within 12 months	2,785,239		379,908
Receivables for project grants after 12 months	445,593	481,873	
<b>Total</b>	<b>3,230,832</b>	<b>481,873</b>	<b>379,908</b>

### Breakdown of receivables for project grants

Expert System S.p.A.	Receivables due within 12 months	Receivables due after 12 months
Horizon 2020	-	330,593
Mise (Ministry of Economic Development) - FIT	252,966	-
MIUR (MINISTRY OF EDUCATION, UNIVERSITIES AND RESEARCH) - FAR	243,892	-
PON	-	115,000
PON R&C 2007-2013	1,952,119	-
European Project - Tender ISEC	336,262	-
<b>Total</b>	<b>2,785,239</b>	<b>445,593</b>

Expert System Iberia	Receivables due within 12 months	Receivables due after 12 months
DANTE		99,750
EVEREST		82,615
K-DRIVE		92,306
LETSCROWD		54,938
TRIVALENT		27,039
XLIME		69,750
XLIME-ES		55,475
<b>Total</b>		<b>481,873</b>

Expert System France	Receivables due within 12 months	Receivables due after 12 months
PRESIDIO	137,601	
Inoova Gora	51,564	
Reference value	8,636	
COMBI	75	
ADR PRISME	101	
RAPID	(1)	
ITRAC	181,118	
E-Compliance	815	
<b>Total</b>	<b>379,910</b>	

### Current assets - Financial assets

Current financial assets amount to € 4,617,476 (€ 5,461,120 in the previous year).

The breakdown and the changes in the individual items are presented as follows:

	Balance at start of the year	Changes in the year	Balance at end of the year
Current equity investments in subsidiaries	4,153,074	430,000	4,583,074
Other current equity investments	8,400	0	8,400
Other current securities	1,299,646	-1,273,644	26,002
<b>Total</b>	<b>5,461,120</b>	<b>-843,644</b>	<b>4,617,476</b>

The change in “Current equity investments in subsidiaries”, equal to € 430,000, is attributable to:

- € 200,000 for the conversion of two convertible bond certificates of a value of € 100,000 each, in the share capital of ADmantX S.p.A., a company in which Expert System S.p.A. holds 60.80% of the share capital. Expert System had previously acquired these convertible bond certificates from IMI Fondi Chiusi SGR S.p.A. via notary endorsement on 26/10/2017 signed by Notary Casali Paola with Offices in Milan;
- € 230,000 for the contribution, on 22/12/2017 by Expert System S.p.A. in favour of ADmantX S.p.A. of an amount as shareholders’ advance payment for share capital increase, with the intention of making available to the investee company the useful financial resources to continue its business and attain its strategic objectives.

The decrease in “Other current securities” is determined by the sale:

- by Expert System S.p.A. of all the units previously held in the bond fund “AZ White Fleet II SICAV”, subscribed on 10/08/2016, recognised at the cost of € 1,002,398;
- of other securities for € 271,245 held by Expert System Deutschland GMBH, as sums intended for temporary investments.

The breakdown of equity investments in subsidiaries recognised as current assets, owned directly or through a trust company or an intermediary

Name	Italian city or Foreign country	Tax code (for Italian companies)	Share capital in €	Profit (Loss) previous year in €	Shareholders’ equity in €	Stake held in €	% held	Book value or corresponding receivable
ADmantX S.p.A.	Naples	02634571208	223,359	(736,745)	383,486	135,802	60.80%	4,583,074
<b>Total</b>								<b>4,583,074</b>

The value of the equity investment in ADmantX S.p.A. was not written down on the basis of the appraisal, carried out in accordance with art. 2343-ter, par. 2 of the Italian Civil Code by Mauro Zavani, listed in the Ordine dei Dottori Commercialisti ed Esperti Contabili (Association of Chartered and Qualified Accountants) of Massa Carrara, an appraisal which valued the company ADmantX S.p.A. at a total of € 11,072,000. This appraisal was definitely enhanced by the share capital increase of the subsidiary ADmantX S.p.A., resolved by the extraordinary shareholders' meeting of 04/08/2015. That occasion saw the entry of new investors in the

shareholding structure, for a total outlay of € 2,160,000, of which € 2,132,633 share premium, allowing the new shareholders to become owners of an aggregate 12.6% of the new share capital, therefore now estimated at € 17,160,000. In respect of said valuation, confirmed by the aforementioned share capital increase, the equity investment in ADmantX S.p.A. was not written down as it is not below the fair value.

The subsidiary ADmantX S.p.A. in turn holds the following interest, indirectly controlled by Expert System S.p.A.:

Company	City or Foreign country	Share capital	Shareholders' equity	Profit /(Loss) 2017	% held
ADmantX Inc.	West Hartford CT 06133-0024, USA	€ 7,064	(€ 2,377,257)	(€ 63,382)	100.00%

### Receivables - broken down by maturity

The information relating to the breakdown of the receivables by maturity is presented below, in accordance with art. 38.1, letter e) of Italian Legislative Decree No. 127/1991:

	Balance at start of the year	Change during the year	Balance at end of the year	Portion due within 1 year	Portion due after 1 year	Of which with a residual duration of over 5 years
Current receivables due from customers	10,232,836	2,151,313	12,384,149	12,384,149		0
Current receivables due from subsidiaries	95,315	(34,547)	60,768	33,982	26,787	0
Current receivables due from associates	255,626	(220,795)	34,831	34,831		0
Current tax receivables	1,248,072	180,366	1,428,438	1,428,438		0
Current prepaid tax assets	1,546,098	596,083	2,142,181	2,142,181		0
Other current receivables	7,478,549	(2,428,463)	5,050,086	4,056,590	993,497	0
<b>Total</b>	<b>20,856,496</b>	<b>243,958</b>	<b>21,100,454</b>	<b>20,080,170</b>	<b>1,020,284</b>	<b>0</b>

### Receivables due from customers - Breakdown by geographic area

	Receivables due from customers	Invoices to be issued	CN to be issued	Other trade receivables	Total
Italian customers	3,812,673	902,140	(43,288)		4,671,525
EU customers	2,519,655	546,681		0	3,066,336
Non-EU customers	2,943,602	1,930,261			4,873,863
Total	9,275,930	3,379,082	(43,288)	0	12,611,724
Bad debt provision	(227,575)				(227,575)
Total	9,048,355	3,379,082	(43,288)	0	12,384,149

### Current assets - Cash and cash equivalents

Cash and cash equivalents included under current assets amount to € 11,234,690 (€ 9,062,940 in the previous year).

The breakdown and the changes in the individual items are presented as follows:

	Balance at start of the year	Change during the year	Balance at end of the year
Bank and postal deposits	8,994,794	2,226,867	11,221,661
Cash at bank and in hand	68,146	(65,117)	3,029
Cheques	-	10,000	10,000
Total	9,062,940	2,171,750	11,234,690

### Accrued income and prepaid expenses

Accrued income and prepaid expenses amount to € 582,304 (€ 1,003,638 in the previous year).

The breakdown and the changes in the individual items are presented as follows:

	Balance at start of the year	Change during the year	Balance at end of the year
Prepaid expenses	1,003,638	(421,334)	582,304
Total accrued income and prepaid expenses	1,003,638	(421,334)	582,304

### Breakdown of prepaid expenses:

	Deferrals within 12 months	Deferrals after 12 months	Deferrals after 5 years
Personnel recruitment and training	6,417	-	-
Rent and leases payable	12,954	-	-
Insurance	6,437	-	-
Commissions	20,497	44,045	79
Consultancy	63,105	-	-
Maintenance	36	-	-
Rentals	31,926	100	-
Sundry services	76,248	-	-
Software	204,358	5,015	-
Internet costs	49,090	382	-
Royalties	-	-	-
Licences	15,883	-	-
Marketing	28,500	-	-
Other deferrals	17,233	-	-
<b>Total</b>	<b>532,683</b>	<b>49,542</b>	<b>79</b>

### Shareholders' equity

The shareholders' equity existing at the end of the year amounted to € 19,275,808 (€ 16,437,207 in the previous year).

The following tables disclose the change during the year in the individual items which make up the shareholders' equity.

	Balance at start of the year	Other allocations	Increases	Decreases	Reclas sificati ons	Profit (loss) for the year	Balance at end of the year
Share capital	276,703	0	80,504	0	0		357,207
Share premium reserve	25,408,688	0	10,571,548	0	0		35,980,236
Legal reserve	43,899	0	0	0	0		43,899
Other reserves							
Extraordinary reserve	3,618,898	0	0	2,125,544	0		1,493,354
Merger surplus reserve	376,622	0	0	0	0		376,622
Reserve for unrealised exchange gains	180,049	0	0	0	0		180,049
Miscellaneous other reserves	419,131	0	406,475	2,272	0		823,334
Total other reserves	4,594,700	0	406,475	2,127,816	0		2,873,359
Cash flow hedging reserve	(6,954)	0	2,882	16,852	0		(20,924)
Retained earnings (losses)	(5,193,900)		6,132,063	0	0		(11,325,963)
Profit (loss) for the year	(8,125,531)	8,125,531				(8,339,127)	(8,339,127)
Negative reserve for treasury shares in portfolio	(560,395)	0	267,516	0	0		(292,879)

Total Group shareholders' equity	16,437,209	8,125,531	17,460,988	2,144,668	0	-8,339,127	19,275,808
Shareholders' equity pertaining to minority interests							
Total consolidated shareholders' equity	16,437,209	8,125,531	17,460,988	2,144,668	0	(8,339,127)	19,275,808

### Share capital

Share capital is composed as follow:

Description	Opening balance, number	Opening balance, nominal value	Shares subscribed during the year, number	Shares subscribed during the year, nominal value	Closing balance, number	Closing balance, nominal value
Ordinary shares	27,670,330	0	8,050,381	0	35,720,711	0
Total	27,670,330	0	8,050,381	0	35,720,711	0

### Miscellaneous other reserves

The "Miscellaneous other reserves" are composed as follows:

Description	Amount
PIA Reserve provision	141,000
Other reserves	412,979
Translation reserve	269,355
Total	823,334

### Cash flow hedging reserve

The information required by article 38.1 letter o-quater) of Italian Legislative Decree no. 127/1991 on changes occurring during the year is summarised in the following table:

Cash flow hedging reserve	
Balance at start of the year	(6,954)
Changes in the year	
Increase due to change in fair value	(13,970)
Balance at end of the year	(20,924)

### Provisions for risks and charges

Provisions for risks and charges are recorded under liabilities for a total of € 948,418 (€ 716,376 in the previous year).

The breakdown and the changes in the individual items are presented as follows:

	Provision for pensions and similar obligations	Provision for taxes, including deferred	Derivative financial instruments - liabilities	Other provisions	Total provisions for risks and charges
Balance at start of the year	4,341	688,100	6,954	16,981	716,376
Changes in the year					-
Provision in the year		377,278		33,614	410,892
Use in the year		192,821			192,821
Other changes			13,970		13,970
Total changes		184,457	13,970	33,614	232,041
Balance at end of the year	4,341	872,557	20,924	50,595	948,418

These are set aside to cover losses or payables which are certain or likely to exist but, in respect of which, the amount or date of occurrence could not be determined at year end.

In measuring these provisions the general principles of prudence and accrual accounting were observed, and no generic risk provisions were set up without economic justification.

Contingent liabilities were recorded in the financial statements and booked to provisions given they were deemed likely and that the amount can be reasonably estimated.

The increases relate to allocations in the year. The decreases refer to uses in the year.

### **EMPLOYEE SEVERANCE INDEMNITY**

The employee severance indemnity is recorded under the liabilities for € 1,876,192 (€ 1,670,520 in the previous year).

The breakdown and the changes in the individual items are presented as follows:

Employee severance indemnity	
Balance at start of the year	1,670,520
Changes in the year	
Provision in the year	420,857
Use in the year	137,359
Other changes	(77,826)
Total changes	205,672
Balance at end of the year	1,876,192

This refers to the actual amounts accrued due to employees in compliance with law and the applicable employment contracts, in consideration of any form of continuous pay.

The provision corresponds to the total of individual indemnities accrued by employees at the close of the financial year, net of any advances provided, and is equal to the amount that would have been due to employees if they had ended their employment on said date.

### **Payables**

The payables are recorded under liabilities for a total of € 27,799,769 (€ 31,330,496 in the previous year).

The breakdown of the individual items is as follows:

	Balance at start of the year	Changes in the year	Balance at end of the year
Bonds	5,000,000	0	5,000,000
Payables due to shareholders for loans			
Payables due to banks	13,641,980	(1,885,858)	11,756,122
Payables due to other lenders	2,829,209	473,087	3,302,296
Payments on account	2,383,029	(1,279,024)	1,104,005
Trade payables	2,738,799	(514,258)	2,224,541
Tax payables	864,641	265,672	1,130,313
Payables due to social security institutions	1,410,643	(711,904)	698,739
Other payables	2,462,195	121,558	2,583,753
<b>Total</b>	<b>31,330,496</b>	<b>(3,530,727)</b>	<b>27,799,769</b>

The company opted not to apply the amortised cost criterion and not to discount the payables.

The accounting policies adopted by the company were:

- not to discount and not to apply the amortised cost criterion to payables due in less than 12 months;
- not to discount the payables as the effective interest rate is not significantly different from the market interest rate;
- not to apply the amortised cost criterion as the transaction costs, fees and all other differences between the original value and value at the due date are negligible.

Payables are therefore recognised at nominal value.

The item “Bonds” is composed of the bond issued by Expert System S.p.A., comprising 50 non-convertible bonds with a par value of € 100,000 each, for a total of € 5,000,000, reserved to professional investors and fully subscribed by the Strategic Fund Trentino Alto Adige managed

by Finint Investments SGR S.p.A..

The main terms and conditions of the Bond Loan are as follows:

<b>Amount</b>	Nominal amount of € 5,000,000.00
<b>Issue date</b>	31/07/2015
<b>Maturity</b>	31/12/2024, date of redemption of the bond loan
<b>Issue price</b>	100% of the nominal value of each bond
<b>Interest rate</b>	Gross annual fixed rate of 4% with half-yearly payments from January 2016
<b>Bond structure</b>	Amortising with 4 years of pre-amortisation

### Payables - Broken down by maturity

Information relating to the breakdown of payables by maturity is provided below, pursuant to art. 38.1, letter e) of Italian Legislative Decree 127/1991:

	Balance at start of the year	Change during the year	Balance at end of the year	Portion due within 1 year	Portion due after 1 year	Of which with a duration of over 5 years
Bonds	5,000,000		5,000,000	5,000,000		2,407,850
Payables due to shareholders for loans						
Payables due to banks	13,641,980	(1,885,858)	11,756,122	3,910,091	7,846,031	100,000
Payables due to other lenders	2,829,209	473,087	3,302,296	1,465,781	1,836,515	1,082,264
Payments on account	2,383,029	(1,279,024)	1,104,005	869,024	234,980	
Trade payables	2,738,799	(514,258)	2,224,541	2,224,541		
Tax payables	864,641	265,672	1,130,313	1,130,313		

Payables due to social security institutions	1,410,643	(711,904)	698,739	698,739		
Other payables	2,462,195	121,558	2,583,753	2,583,753		
<b>Total payables</b>	<b>31,330,496</b>	<b>(3,530,727)</b>	<b>27,799,769</b>	<b>17,882,242</b>	<b>9,917,527</b>	<b>3,590,114</b>

### Payables backed by collaterals on company assets

The information concerning collaterals on company assets is presented below, pursuant to art. 38.1, letter e) of Italian Legislative Decree No. 127/1991:

	Payables backed by mortgages	Payables not backed by collaterals	Total
Bonds		5,000,000	5,000,000
Payables due to banks	82,223	11,673,899	11,756,122
Payables due to other lenders		3,302,296	3,302,296
Payments on account		1,104,005	1,104,005
Trade payables		2,224,541	2,224,541
Tax payables		1,130,313	1,130,313
Payables due to social security institutions		698,739	698,739
Other payables		2,583,753	2,583,753
<b>Total payables</b>	<b>82,223</b>	<b>27,717,546</b>	<b>27,799,769</b>

### Accrued expenses and deferred income

Accrued expenses and deferred income are recorded under liabilities for a total of € 6,598,047 (€ 7,235,666 in the previous year).

The breakdown and the changes in the individual items are presented as follows:

	Balance at start of the year	Change during the year	Balance at end of the year
Accrued expenses	131,190	132,927	264,117
Deferred income	7,104,476	-770,546	6,333,930
Total accrued expenses and deferred income	7,235,666	-637,619	6,598,047

#### Breakdown of deferred income:

	Due within 12 months	Due after 12 months	Due after 5 years
Hosting fees	2,506	206	-
Research project grants	805,168	2,534,157	-
Tax credits	354,134	1,040,395	-
Licences	237,013	-	-
Maintenance	1,061,051	-	-
Provision of services	265,993	-	-
Other deferrals	33,305	-	-
Total	2,759,170	3,574,759	-

Accrued expenses and deferred income were calculated on an accruals basis during the year. For multi-year accruals and deferrals, the conditions that led to their original recognition were verified, where necessary, applying the necessary changes.

Accruals and deferrals represent the adjusting entries for the year, accounted for using the accrual principle.

The criteria adopted for the valuation and conversion of amounts stated in foreign currency for these items are reported in the first part of these explanatory notes.

As at 31/12/2017, no accruals and deferrals had a duration of more than five years.

## INFORMATION ON THE INCOME STATEMENT

### Revenue recognition

Revenues from product sales are recognised at the moment of the transfer of risks and benefits, which normally corresponds to the delivery or shipment of the goods.

Financial revenues and those deriving from the provision of services are recognised on an accrual basis.

Revenues and income and costs and expenses relating to currency transactions are determined at the current exchange rate on the date the transaction is completed.

Income and charges relating to sale and purchase transactions with compulsory buy-back/sell-back obligation, including the difference between the forward and spot prices, are recognised for the amounts accrued for the year.

### Value of production

Description	Previous period	Current period	Change
Sales and service revenues	23,367,938	26,136,230	2,768,292
Changes in contract work in progress	(1,169,763)	(527,733)	642,029
Increase in own work capitalised	5,665,880	5,552,488	(113,392)
Other revenues and income	1,689,042	1,646,570	(42,472)
<b>Total</b>	<b>29,553,097</b>	<b>32,807,555</b>	<b>3,254,457</b>

### Sales and service revenues

In relation to the matters laid down by art. 38.1, letter i) of Italian Legislative Decree No. 127/1991, the breakdown of revenues by business category and geographic area is illustrated in the following table:

#### Breakdown of revenues from sales and services by geographic area:

Geographic area	Current year balance
Revenues – Italy	10,104,788
EU revenues	5,618,370
Non-EU revenues	10,413,072
<b>Total</b>	<b>26,136,230</b>

### Other revenues and income

Other revenues and income are recorded under value of production in the income statement for a total of € 1,646,570 (€ 1,689,042 in the previous year).

The breakdown of the individual items is as follows:

	Previous period	Current period	Change
Tax credits	158,362	425,885	267,523
Capital grants	914,531	779,126	(135,406)
Operating grants	274,134	46,402	(227,731)
Sundry reimbursements	105,964	119,621	13,657
Other revenues	236,051	275,536	39,485
<b>Total</b>	<b>1,689,042</b>	<b>1,646,570</b>	<b>(42,472)</b>

The Group receives grants from various bodies (European Community according to the methods envisaged in the Seventh Framework Programme, Horizon 2020, Ministry of Education, Universities and Research, Ministry of Economic Development and other institutions) aimed at financing research and development projects.

These grants are classified under grants related to assets since they are contributions targeted at financing long-term investments. As regards the accounting of these grants, the indirect method envisaged by OIC 16 was chosen, involving the deferral of said grants in proportion to the amortisation of the costs of R&D to which they refer.

### Costs for services

Costs for services are recorded under costs of production in the income statement for a total of € 8,915,207 (€ 9,649,047 in the previous year).

The breakdown of the individual items is as follows:

	Previous year balance	Current year balance	Change
Electricity	105,189	102,353	-2,836
Maintenance and repair costs	186,784	149,104	-37,680
Technical services and consultancy	3,593,404	2,771,426	-821,978
Directors' fees	1,259,428	1,235,213	-24,215
Statutory and Independent Auditors' fees	14,560	21,163	6,603
Services classed as employment	37,944	35,424	-2,520

Commission expense	72,608	50,752	-21,856
Advertising	227,771	217,321	-10,450
Legal expense and consultancy	488,897	412,072	-76,825
Tax, administrative and commercial consultancy	1,297,072	1,011,970	-285,102
Telephone expenses	193,417	187,824	-5,593
Non-financial services from finance companies and banks	117,689	56,583	-61,106
Insurance	99,865	181,454	81,589
Entertainment costs	39,010	43,388	4,378
Travel and accommodation costs	826,063	776,840	-49,223
Updating, education and training expense	100,021	97,693	-2,328
Allocation to the supplementary indemnity fund for customers due to agents	1,190	0	-1,190
Allocation to employee severance indemnities	557	0	-557
Other	987,578	1,564,628	577,050
<b>Total</b>	<b>9,649,047</b>	<b>8,915,207</b>	<b>-733,840</b>

### Use of third party assets

Costs for the use of third party assets are recorded under costs of production in the income statement for a total of € 1,673,817 (€ 1,803,011 in the previous year).

The breakdown of the individual items is as follows:

	Previous period	Current period	Change
Rent and leases payable	792,547	822,015	29,469
Cloud rental	293,342	292,764	(578)
Truck rental	1,035	67	(968)
Other vehicle rental	163,778	185,673	21,894
Hardware rental	31,055	21,100	(9,954)
Royalties	521,254	352,199	(169,056)
<b>Total</b>	<b>1,803,011</b>	<b>1,673,817</b>	<b>(129,194)</b>

### Personnel costs

The item includes all expenses for employees, including therein merit pay increases, promotions, automatic cost-of-living increases, the cost of holidays accrued but not taken and provisions required by law and by and collective contracts.

### Sundry operating expenses

Sundry operating expenses are recorded under costs of production in the income statement for a total of € 248,162 (€ 803,076 in the previous year).

The breakdown of the individual items is as follows:

	Previous period	Current period	Change
Taxes and duties	178,444	128,989	(49,456)
Losses on receivables	44,307	55,070	10,763
Magazine and newspaper subscriptions	36,341	7,348	(28,993)
Other operating expenses	543,983	56,755	(487,228)
<b>Total</b>	<b>803,076</b>	<b>248,162</b>	<b>(554,913)</b>

### Interest and other financial expenses

In relation to the matters laid down by art. 38.1, letter l) of Italian Legislative Decree No. 127/1991, the breakdown of the item “interest and other financial expenses” is illustrated in the following table:

	Previous period	Current period	Change
Interest on bond payables	202,949	200,000	(2,949)
Interest on mortgages	286,272	205,937	(80,335)
Interest on factoring	-	48,756	48,756
Surety commissions	81,520	22,879	(58,641)
Overdraft fees	21,822	18,631	(3,191)
Loan fees	3,359	5,786	2,428
Other financial expenses	1,758	11,791	10,034
<b>Total</b>	<b>597,680</b>	<b>513,781</b>	<b>(83,899)</b>

### Income taxes

The breakdown of the individual items is as follows:

Current taxes	Previous years' taxes	Deferred taxes	Prepaid taxes	Income (expenses) from compliance with tax consolidation / tax transparency	Total
62,830	0	377,278	(788,237)		(348,129)
62,830	0	377,278	(788,237)		(348,129)

## OTHER INFORMATION

### Statement of reconciliation between shareholders' equity and result for the year of the parent company and the corresponding consolidated balances

	Shareholders' equity	of which: profit (loss) for the year
Balances as per the financial statements of the parent company	37,187,045	(1,071,519)
Adjusted balances as per the financial statements of the parent company	37,187,045	(1,071,519)

Effect of the valuation of equity investments using the line-by-line method		
- Elimination of the book values of the investees	(13,191,495)	
- Shareholders' equities of the investees	2,618,664	
- Investees' profit (loss) for the year	(5,506,951)	(5,506,951)
- Amortisation of consolidation differences	(1,722,190)	(1,722,190)
Fixed assets sale adjustments	(126,175)	(126,175)
Other adjustments	16,911	87,709
<b>Total adjustments</b>	<b>(17,911,237)</b>	<b>(7,267,608)</b>
Group shareholders' equity and result for the year	19,275,808	(8,339,127)
<b>Consolidated shareholders' equity and result for the year</b>	<b>19,275,808</b>	<b>(8,339,127)</b>

### List of companies included in the scope of consolidation

In relation to the matters laid down by art. 38.2, letters a) to d) of Italian Legislative Decree No. 127/1991, the following lists are presented:

### List of equity investments included in the scope of consolidation using the line-by-line method

Company name	Registered offices	Currency	SE as at 31/12/2017	Share capital	Profit/(Loss) 31/12/2017	Group direct holding	Group indirect holding
Expert System USA Inc.	Delaware (USA)	\$ USA	\$ (5,161,272)	\$ 1.00	\$ (725,931)	100%	
Expert System Enterprise Corp.	Rockville (USA)	\$ USA	\$ (3,709,519)	\$ 200	\$ (1,248,490)		100%

Expert System Cogito Ltd.	London (UK)	£	£ (615,992)	£ 1,000	£ (83.61)	100%	
Expert System Iberia S.L.U.	Barcelona (ESP)	Euro	€ (2,724,576)	€ 3,000	€ (1,033,584)	100%	
Expert System France S.A.	Paris (FRA)	Euro	€ (454,403)	€ 1,332,072	€ (1,850,131)	100%	
Expert System Canada	Montreal (CAN)	\$ Can.	\$ (152,504)	\$ 1,000	\$ (66,022)		100%
Expert System Deutschland GMBH	Heidelberg (GER)	Euro	€ 48,763	€ 25,000	€ (732,094)		100%

#### List of other equity investments in subsidiaries and associates

Name	Italian city or Foreign country	Share capital in €	Profit (Loss) previous year in €	Shareholders' equity in €	% held
ADmantX S.p.A.	Naples	223,359	(736,745)	383,486	60.80%
ADmantX Inc.	West Hartford CT 06133-0024, USA	7,064	(63,382)	(2,377,257)	100.00%
CY4Gate S.r.l.	Rome	300,000	(885,544)	385,774	24.50%

#### Breakdown of personnel

The information concerning personnel is presented below, pursuant to art. 38.1, letter n) of Italian Legislative Decree 127/1991:

	Average no. in current year	Average no. in previous year
Senior Managers	-	-
Middle management	63	62
Employees	168	171
<b>Total</b>	<b>231</b>	<b>233</b>

### Fees for the directors and statutory auditors of the parent company

The information concerning the fees of the directors and statutory auditors of the parent company for the performance of these functions also in other companies included in the scope of consolidation, as per art. 38.1, letter o) of Italian Legislative Decree No. 127/1991, is presented below:

	Directors	Statutory Auditors
Fee	1,253,213	14,726

### Derivative financial instruments

The parent company Expert System S.p.A. has signed the following derivative contracts:

d) CARIPARMA

- Derivative contract type: IRS no. 59746/2014, unlisted, signed on 15/01/2014, expiring 31/12/2018;
- Purpose: hedging;
- Transaction with no principal swap;
- Notional amount of the contract: € 1,200,000;
- Liability hedged: CARIPARMA mortgage no. 04 107 008852280000, originated for € 1,200,000, signed on 23/12/2013 and expiring on 31/12/2018.;
- Notional amount at the reference date (31/12/2017): € 253,199;
- Amount of the liability hedged at the reference date (31/12/2017): € 253,199;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: negative mark to model fair value of € 2,006.57;
- fair value at the start of the hedge: zero

e) CARIPARMA

- Derivative contract type: IRS no. 65611/2017, unlisted, signed on 25/09/2017, expiring 30/01/2023;
- Purpose: hedging;
- Transaction with no principal swap;
- Notional amount of the contract: € 1,000,000;
- Liability hedged: CARIPARMA mortgage no. 0106917000000, originated for € 1,000,000, signed on 25/09/2017 and expiring on 30/01/2023;
- Notional amount at the reference date (31/12/2017): € 1,000,000;
- Amount of the liability hedged at the reference date (31/12/2017): € 1,000,000;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: negative mark to model fair value of € 15,080.21;
- fair value at the start of the hedge: zero

f) BANCO BPM

- OTC derivative contract “Maximum rate with fractioned premium” ID 790526 F 00104961 D 00038973 signed on 24/07/2017 and expiring on 31/12/2022;
- Purpose: hedging;
- Transaction with no principal swap;
- Notional amount of the contract: € 400,000;
- Liability hedged: BANCO BPM mortgage no. 03703813, originated for € 400,000, signed on 24/07/2017 and expiring on 31/12/2022.;
- Notional amount at the reference date (31/12/2017): € 400,000;
- Amount of the liability hedged at the reference date (31/12/2017): € 400,000;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: negative mark to model fair value of € 3,837.38;
- fair value at the start of the hedge: zero

### **Off-balance sheet commitments, guarantees and potential liabilities**

As at the year end date, the following guarantees were outstanding:

	Opening balance	Closing balance	Change
<i>SURETIES</i>	3,728,067	2,564,869	(1,163,198)
- to subsidiaries	300,000	600,000	300,000
- to other companies	3,428,067	1,964,869	(1,463,198)

These refer to surety guarantees to banks for € 1,470,469. The remaining € 1,094,400 is made up as follows:

- € 494,400 is made up of the surety undertaken in favour of the investee company Okkam S.r.l.
- € 600,000 of the specific surety guarantee regarding an unsecured loan of the same amount started in 2017, issued in favour of the subsidiary ADmantX S.p.A..

After the conversion, in the year 2017, of all the convertible bonds of the investee company ADmantX S.p.A., which as at 31/12/2016 had a total value of € 300,000, the guarantee was redeemed, which had been given by Expert System S.p.A. to the subsidiary ADmantX S.p.A., assumed by means of a private agreement between Expert System S.p.A. and IMI Fondi Chiusi società di gestione del risparmio S.p.A. (IMI) to guarantee the redemption of the bond loan on the expiry dates set by the relevant regulation.

### Related party transactions

The information concerning transactions of the parent company Expert System S.p.A. with related parties is presented below, pursuant to art. 38.1, letter o-quinquies) of Italian Legislative Decree 127/1991.

### Trade and financial transactions

Company	Financial payables	Financial receivables	Trade receivables	Trade payables	Sales	Purchases
ADMANTX SPA	-	26,787	33,982	-	76,792	-
EXPERT SYSTEM USA INC	-	4,282,615	796,589	-	498,884	8,536
EXPERT SYSTEM LTD	-	631,865	272,119	-	284,881	142,699

CY4GATE SRL		733,823	34,831		122,213	-
EXPERT SYSTEM IBERIA S.L.U.	-	4,178,698	566,354	22,075	319,091	22,075
EXPERT SYSTEM FRANCE	-	3,437,378	375,923	838,132	315,615	663,132
EXPERT SYSTEM ENT CORP	-	1,499,264	1,343,771	3,048	886,967	3,048
EXPERT SYSTEM GMBH	-	330,663	69,259	8,830	70,132	8,830
<b>Total</b>	<b>-</b>	<b>15,121,092</b>	<b>3,492,827</b>	<b>872,084</b>	<b>2,574,573</b>	<b>848,318</b>

### Trade transactions

Company	Payables	Receivables	Guarantees	Commitments	Costs	Revenues
ADMANTX SPA	-	33,982	-	-	-	76,792
EXPERT SYSTEM USA INC	-	796,589	-	-	8,536	440,654
EXPERT SYSTEM LTD	-	272,119	-	-	142,699	272,119
CY4GATE SRL	-	34,831	-	-	-	99,500
EXPERT SYSTEM IBERIA S.L.U.	22,075	566,354	-	-	22,075	260,014
EXPERT SYSTEM FRANCE	838,132	375,923	-	-	663,132	288,613
EXPERT SYSTEM ENT CORP	3,048	1,343,771	-	-	3,048	864,220
EXPERT SYSTEM GMBH	8,830	69,259	-	-	8,830	69,469
<b>Total</b>	<b>872,083.88</b>	<b>3,492,827</b>	<b>-</b>	<b>-</b>	<b>848,318</b>	<b>2,371,381</b>

### Financial transactions

Company	Payables	Receivables	Guarantees	Commitments	Expenses	Income
ADMANTX SPA	-	26,787	-	-	-	-

EXPERT SYSTEM USA INC	-	4,282,615	-	-	-	58,229
EXPERT SYSTEM LTD	-	631,865	-	-	-	12,762
CY4GATE SRL	-	733,823	-	-	-	22,713
EXPERT SYSTEM IBERIA S.L.U.	-	4,178,698	-	-	-	59,077
EXPERT SYSTEM FRANCE	-	3,437,378	-	-	-	27,001
EXPERT SYSTEM ENT CORP	-	1,499,264	-	-	-	22,747
EXPERT SYSTEM GMBH	-	330,663	-	-	-	663
<b>Total</b>	-	<b>15,121,092</b>	-	-	-	<b>203,192</b>

These relations, which do not include atypical and/or unusual transactions, are regulated by normal market conditions. Information on the nature of these transactions is provided below.

#### **With the subsidiary ADmantX S.p.A.:**

##### Sales

- Lease agreement for property in Naples, Via Nuova Poggio Reale, Centro Polifunzionale Inail, where the company has its registered offices: yearly lease instalment of € 5,083.20;
- Sub-letting agreement for local office in Modena, Via Virgilio 56/Q: yearly lease instalment of € 3,668;
- Sub-letting agreement for local office in Milan, Piazza Cavour: yearly lease instalment of € 6,000;
- Services contract relating to accounting support, company economic-financial consultancy, secretarial and general services:
  - Fee for accounting support and company consultancy € 24,000;
  - Fee for secretary activities € 1,200;
  - Fee for general services (telephone, cleaning services and material, security,

electricity, stationery, management software maintenance): lump-sum payment for € 6,576 calculated as 4.15% of the costs incurred by Expert System S.p.A.

- Sale of licences for € 30,000.

The balance sheet items affected by these contracts are reclassified in the following accounts:

- C.II.2 Receivables due from subsidiaries

The income statement items are reclassified within the following accounts:

- A.1 Sales and service revenues;
- A.5 Other revenues and income

#### **With the subsidiary Expert System USA Inc.:**

Loan granted to the subsidiary for € 4,157,828, bearing interest in 2017 for € 58,229.28.

##### Sales

- Granting of licences for € 260,308;
- Professional services provided for € 124,524;
- Maintenance fees for € 50,029;
- Re-invoicing of sundry expenses of € 5,793 to the subsidiary.

##### Purchases

- Re-invoicing of sundry expenses of € 8,536 by the subsidiary.

#### **With the subsidiary Expert System Cogito Ltd.:**

Loan granted to the subsidiary for € 619,103, bearing interest in 2017 for € 12,761.97.

##### Sales

- Granting of licences for € 49,029.00;
- Professional services provided for € 179,122;
- Re-invoicing of sundry expenses of € 43,968 to the subsidiary.

##### Purchases

- Re-invoicing of sundry expenses of € 142,699 by the subsidiary.

#### **With the subsidiary Expert System Iberia S.L.U.:**

Loan granted to the subsidiary for € 4,036,000, bearing interest in 2017 for € 59,077.

### Sales

- Professional services provided for € 106,643;
- Granting of licences for € 129,770;
- Maintenance fees for € 4,685;
- Re-invoicing of sundry expenses of € 18,916 to the subsidiary.

### Purchases

- Professional services provided by the subsidiary for € 22,075.

### **With the subsidiary Expert System France S.A.:**

Loan granted to the subsidiary for € 3,398,190, bearing interest in 2017 for € 27,001.

### Sales

- Professional services provided for € 85,005;
- Granting of licences for € 194,793;
- Re-invoicing of sundry expenses of € 8,815 to the subsidiary.

### Purchases

- Professional service activities performed by the subsidiary for € 54,498;
- Development activities on Cogito performed by the subsidiary for € 608,634;
- Software Luxid for € 175,000 owned by the subsidiary and purchased by Expert System S.p.A. on 31/12/2017.

### **With the subsidiary Expert System Enterprise Corp.:**

Loan granted to the subsidiary for € 1,459,185, bearing interest in 2017 for € 22,747.

### Sales

- Granting of licences for € 694,482;
- Professional services provided for € 41,293;
- Re-invoicing of sundry expenses of € 3,386 to the subsidiary;
- Maintenance fees for € 125,058.

### Purchases

- Professional services provided by the subsidiary for € 3,048.

### **With the subsidiary Expert System Deutschland GmbH:**

- Loan granted to the subsidiary for € 330,000, bearing interest in 2017 for € 663.

#### Sales

- Professional services provided for € 48,271;
- Granting of licences for € 15,000;
- Re-invoicing of sundry expenses of € 3,948 to the subsidiary;
- Maintenance fees for € 2,250.

#### Purchases

- Professional services provided by the subsidiary for € 8,830.

### **With the associate Cy4Gate S.r.l.:**

- Loan granted to the associate for € 690,000, bearing interest in 2017 for € 22,713.

The balance sheet item affected by this transaction is:

- III) Non-current financial assets, 2) Receivables, a) Due from subsidiaries

The income statement item is reclassified in the following account:

- Financial income and expenses, 16) Other financial income, d) other income

#### Sales

- Granting of licences for € 22,500;
- Professional services provided for € 77,000.

### **Off-balance sheet agreements**

Pursuant to article 38.1 letter o-sexies) of Italian Legislative Decree no. 127/1991, note that there is no information regarding the nature and economic objective of agreements not recorded in the balance sheet.

### **Information on fees pursuant to art. 38.1, letter o-septies) of Italian Legislative Decree 127/1991**

Details are provided below of the amounts paid to the independent auditors, BDO Italia S.p.A., for audit of the consolidated accounts, other audit services, tax consultancy services and non-audit services provided to the Group pursuant to article 38.1 letter o-septies), Italian Legislative Decree no. 127/1991:

	Expert System S.p.A.	Expert System France	Expert System Iberia	Expert System GMBH	Expert System LTD	Expert System ENT	Expert System USA INC	Expert System CAN
Tax consultancy costs and other audit services performed		10,000	38,556	13,842		34,725	6,199	
Audit service costs	23,500	33,262	2,925					

## SIGNIFICANT EVENTS AFTER THE CLOSE OF THE YEAR

The inclusion of Expert System is confirmed again for 2018 in the “KMWorld 100 Companies that Matter in Knowledge Management” rankings, which lists the best solutions worldwide offered by companies operating in Knowledge Management, selected by a group of sector experts and market analysts.

In 2018 Expert System is continuing to strengthen its role in the digitalisation of the companies operating in the insurance market. Gruppo GENERALI will implement in Spain the artificial intelligence potential of the *Cogito*<sup>®</sup> technology in managing corporate processes. The insurance group, in line with its innovation and digitalisation strategy, will benefit from Cogito’s unique advantages in managing large volumes of non-structured information for the automatic classification of about 1 million emails that the insurance company receives every year as part of customer support. The objective is to extend the benefits of artificial intelligence and cognitive computing also to other business areas.

Finally, on 23/03/2018, the Board of Directors of Expert System S.p.A. resolved to recapitalise the investee companies Expert System France S.A. and Expert System Iberia S.L.U. by waiving part of the financial receivables from the two subsidiaries. In particular, the waiver to the credit by Expert System S.p.A. took place:

- for € 2,681,383 as part of the financial receivable due from Expert System France S.A.;
- for € 1,100,000 as part of the financial receivable due from Expert System S.L.U.

## BUSINESS OUTLOOK

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The Board of Directors approved the 2018-2019 guidelines, which aim to consolidate the growing trends of the revenues recorded in 2017 with a view to increasingly diversify internationally.

The market is progressively maturing and is turning into a niche, though of high level, with widespread requirements understood also by the top management; more and more frequently medium and large-sized companies are starting significant projects within the framework of Artificial Intelligence which Expert System is engaged in. It is a discontinuous process where evolved companies can be found, which are ready to invest considerable amounts to obtain large returns, combined with others which are still in the “exploration” phase, thus with a limited budget.

This favourable market condition will be accompanied by the possibility of replicating vertical implementation of the COGITO platform and its products, with the aim of addressing specific and prompt requirements.

The sectors that are proving more dynamic are the financial, the insurance and the intelligence-governance ones; others, though, already in 2017, started to show more interest in Artificial Intelligence, confirming how these products will progressively permeate all the production sectors, whether regarding services or manufacturing. Certainly this is a very positive factor which, however, will take, like all new markets, a few years to clearly produce its effects.

Also thanks to the phenomena described above, sales are likely to feature increased “standardisation”, with a growing portion of licensing and an increasingly “recurrent” nature, thus progressively forming a solid base for more consistently repeated revenues. The growing revenues may also be linked to the development of a set of partnerships with system integration and consultancy companies that, in addition to amplifying the commercial potentials and the distribution of solutions, may directly deal with most of the professional services needed, thus allowing Expert System to progressively cover the role of “vendor” of very high level solutions within the scope of artificial intelligence.

In 2019 the Group aims to achieve revenues between € 33 and € 34.5 million with EBITDA ranging between € 7 and 8 million. The target financial position is expected to reach between € 13.0 and 12.0 million.

The forecasts are as follows (values in millions of Euro):

	2017	2018	2019
Revenues	25.6	28.5 – 30	33.0 – 34.5
Value of production	32.8	35.5 – 37	39.8 – 41.3
EBITDA	1.0	4.0 – 5.0	7.0 – 8.0
EBIT	(6.5)	(3.7) – (2.7)	(1.1) – (0.1)
Net profit	(8.3)	(4.6) – (3.9)	(2.3) – (1.6)
NFP	8.8	13.6 – 12.9	13.0 – 12.0

The review of the estimates compared to those at the beginning of 2017 is linked, as specified previously, to the partial maturity of the market, which proves significant improvements, though not at the growth rates expected at the time by the industry analysts. Having said this, the adoption of AI solutions is a trend we considered now to be consolidated and “unstoppable”, contrary to what happened during the first wave of Artificial Intelligence in the 90’, when the initial great enthusiasm shown came to a sudden halt due to the lack of results and the missed expectations.

These days, starting from Expert System, considerable economic and strategic advantages can be proven by the adoption of solutions of this type.

The net profit for 2018 and 2019 will continue to be significantly influenced by the annual amortisation of goodwill, equal to about 2.2 million, regarding the acquisition of companies made abroad, and by the considerable amortisation that mainly concern R&D activities carried out in previous years. During 2019 operating cash is expected to return, in light of the rising revenues, the optimised sales mix and the definitive implementation of the rationalisation of group costs.

These financial statements, composed of the Balance Sheet, Income Statement, Cash Flow Statement and Explanatory Notes, give a true and fair view of the financial position and the result for the year and correspond to the accounting records.

Chairman of the Board of Directors  
Marco Varone



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**EXPERT SYSTEM S.p.A.**

Independent auditor's report pursuant to article 14 of  
Legislative Decree n. 39, dated January 27, 2010

Consolidated financial statements at 31 December 2017

*This report has been translated into English from the original, which was prepared in Italian and represents the only authentic copy, solely for the convenience of international readers.*

## Independent auditor's Report

pursuant to article 14 of Legislative Decree n. 39, dated January 27, 2010

To the shareholders of  
EXPERT SYSTEM S.p.A.

### Report on the consolidated financial statements

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#### Opinion

We have audited the consolidated financial statements of EXPERT SYSTEM SPA and its subsidiaries (the "Expert System Group"), which comprise the balance sheet as of December 31, 2017, the statement of income, the statement of changes in equity, the cash flow statements and related explanatory notes.

In our opinion the consolidated financial statements give a true and fair view of the financial position of Expert System Group as of December 31, 2017 and of the result of its operations for the year then ended in accordance with the Italian regulations and accounting principles governing financial statements.

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#### Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (ISA Italia). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are independent of the Company in accordance with the ethical and independence requirements applicable in Italy to the audit of financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

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#### Responsibilities of Management and Those Charged with Governance for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of the consolidated financial statements in accordance with the Italian regulations and accounting principles governing financial statements and, within the terms provide by the law, for such internal control as management determines is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is responsible for assessing the Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless management either intends to liquidate the holding Company or to cease operations, or has no realistic alternative but to do so.

Those charged with governance are responsible for overseeing the Company's financial reporting process.

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#### Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISA Italia will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

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As part of an audit in accordance with ISA Italia, we exercise professional judgment and maintain professional scepticism throughout the audit. We also have:

- Identified and assessed the risks of material misstatement of the financial statements, whether due to fraud or error, designed and performed audit procedures responsive to those risks, and obtained audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtained an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.
- Evaluated the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Concluded on the appropriateness of management's use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Company's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluated the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtained sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We have communicated with those charged with governance, as properly identified in accordance with ISA Italia, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We have also provided those charged with governance with a statement that we have complied with relevant ethical and independence requirements applicable in Italy, and communicated with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the consolidated financial statements of the current period and are therefore the key audit matters. We described those matters in the auditor's report.

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## **Report on other legal and regulatory requirements**

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### **Opinion pursuant to article 14, paragraph 2, letter e) of Legislative Decree n. 39/10**

The directors of EXPERT SYSTEM S.p.A. are responsible for the preparation of the report on operations of EXPERT SYSTEM S.p.A. as at December 31, 2017, including their consistency with the consolidated financial statements and their compliance with the applicable laws and regulations.

We have performed the procedures required under audit standard (SA Italia) n. 720B in order to express an opinion on the consistency of the report on operations, with the consolidated financial statements of EXPERT SYSTEM S.p.A. as at December 31, 2017 and on their compliance with the applicable laws and regulations, and in order to assess whether they contain material misstatements.

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In our opinion, the report on operations is consistent with the consolidated financial statements of EXPERT SYSTEM Group as at December 31, 2017 and is compliant with applicable laws and regulations.

With reference to the assessment pursuant to article 14, paragraph. 2, letter e) of Legislative Decree n. 39/10 based on our knowledge and understanding of the entity and its environment obtained through our audit, we have nothing to report.

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Bologna, April 7, 2018

BDO Italia S.p.A.



Alessandro Gallo  
Partner