



**EXPERT SYSTEM GROUP  
HALF-YEARLY REPORT  
AS OF 30/06/2020**



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## CORPORATE BODIES

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### Board of Directors

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<i>Chairman of the Board of Directors – Executive Chairman</i>	STEFANO SPAGGIARI
<i>Director - CTO</i>	MARCO VARONE
<i>Director - CEO</i>	WALTER LLOYD MAYO III
<i>Director</i>	SARA POLATTI
<i>Director</i>	ETTORE LEALE
<i>Director</i>	KAREN JO CAMBRAY
<i>Independent Director</i>	ALBERTO SANGIOVANNI VINCENTELLI
<i>Independent Director</i>	STEFANO PEDRINI

### Board of Statutory Auditors

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<i>Chairman of the Board of Statutory Auditors</i>	PATRIZIA ARIOLI
<i>Statutory Auditor</i>	FEDERICO BACCHIEGA
<i>Statutory Auditor</i>	DANIELE PONTE

## CONSOLIDATED FINANCIAL STATEMENTS AS OF 30/06/2020



### BALANCE SHEET

ASSETS	30/06/2020	31/12/2019
<b>A) SUBSCRIBED CAPITAL, UNPAID</b>		
<b>Total subscribed capital, unpaid (A)</b>		
<b>B) FIXED ASSETS</b>		
I - Intangible fixed assets		
1) Start-up and expansion costs	464,205	569,394
2) Development costs	11,733,976	11,121,045

3) Industrial patent rights and intellectual property rights	422,438	484,809
4) Concessions, licenses, trademarks and similar rights	14,507	14,833
5) Goodwill	450,853	901,697
6) Assets under construction and advances	-	-
7) Other	-	-
Total intangible fixed assets	<b>13,085,979</b>	<b>13,091,778</b>
II - Tangible fixed assets		
1) Land and buildings	335,019	340,562
2) Plants and machinery	7,727	5,953
4) Other tangible fixed assets	342,365	355,151
Total tangible fixed assets	<b>685,111</b>	<b>701,666</b>
III - Financial fixed assets		
1) Equity investments in:		
b) Associated companies	-	-
d-bis) Other companies	60,777	309,471
Total equity investments	<b>60,777</b>	<b>309,471</b>
2) Receivables		
a) From subsidiaries		
Due within 12 months	-	-
b) From associated companies		
Due within 12 months	-	-
Due after 12 months	-	-
d-bis) From others		
Due within 12 months	564,361	427,181
Due after 12 months	-	150,000
Total receivables (2)	<b>564,361</b>	<b>577,181</b>
3) Other securities	-	80,880

Total financial fixed assets	625,138	967,532
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<b>Total fixed assets (B)</b>	<b>14,396,228</b>	<b>14,760,976</b>
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### C) CURRENT ASSETS

#### I - Inventory

3) Work in process on long-term contracts	8,649	58,608
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Total inventory	<b>8,649</b>	<b>58,608</b>
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#### II) Receivables

##### 1) From customers

Due within 12 months	14,178,623	20,446,973
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Total receivables from customers	<b>14,178,623</b>	<b>20,446,973</b>
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##### 2) From subsidiaries

Due within 12 months	-	-
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Due after 12 months	-	-
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Total receivables from subsidiaries	-	-
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##### 3) From associated companies

Due within 12 months	-	-
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Total receivables from associated companies	-	-
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##### 5-bis) Tax receivables

Due within 12 months	2,052,088	1,200,026
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Due after 12 months	-	6,699
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Total tax receivables	<b>2,052,088</b>	<b>1,206,725</b>
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##### 5-ter) Deferred tax assets

Due within 12 months	531,895	525,230
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Due after 12 months	1,505,243	1,308,811
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Total deferred tax assets	<b>2,037,138</b>	<b>1,834,041</b>
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##### 5-quater) From others

Due within 12 months	3,209,609	3,580,185
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Due after 12 months	2,025,425	2,206,417
Total receivables from others	<b>5,235,034</b>	<b>5,786,602</b>
Total receivables	<b>23,502,883</b>	<b>29,274,341</b>
III - Financial assets not constituting fixed assets		
1) Equity investments in subsidiaries	-	-
4) Other equity investments	8,400	8,400
6) Other securities	7,589	20,196
Total financial assets not constituting fixed assets	<b>15,989</b>	<b>28,596</b>
IV - Cash and cash equivalents		
1) Bank and postal deposits	31,612,917	21,644,993
3) Cash on hand	2,465	2,449
2) Cheques	-	-
Total cash and cash equivalents	<b>31,615,382</b>	<b>21,647,442</b>
<b>Total current assets (C)</b>	<b>55,142,903</b>	<b>51,008,987</b>
<b>D) ACCRUALS AND DEFERRALS</b>	<b>425,867</b>	<b>433,468</b>
<b>TOTAL ASSETS</b>	<b>69,964,998</b>	<b>66,203,431</b>

## BALANCE SHEET

LIABILITIES	30/06/2020	31/12/2019
<b>A) GROUP SHAREHOLDERS' EQUITY</b>		
I) Capital	411,272	400,161
II - Share premium reserve	45,497,959	42,509,070
IV - Legal reserve	80,032	71,718
VI - Other reserves, separately indicated		
Extraordinary reserve	4,611,171	2,008,739
Merger surplus reserve	376,622	376,622

Reserve for unrealised exchange gains	398,956	398,956
Other miscellaneous reserves	890,365	688,839
Total other reserves	6,277,114	3,473,156
VII - Reserve for expected cash flow hedges	(114,293)	(70,275)
VIII - Profit (losses) carried forward	(28,057,190)	(24,499,918)
IX - Profit (loss) for the year	(3,053,801)	(983,007)
X - Negative reserve for treasury shares in portfolio	-	-
Total consolidated shareholders' equity	<b>21,041,093</b>	<b>20,900,905</b>
Minority interest in shareholders' equity		
Minority interest in capital and reserves	-	-
Minority interest in profit (loss)	-	-
Total minority interest in equity	-	-

<b>Total consolidated shareholders' equity</b>	<b>21,041,093</b>	<b>20,900,905</b>
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#### B) PROVISIONS FOR RISKS AND CHARGES

1) For pensions and similar obligations	4,341	4,341
2) For taxes, including deferred taxes	1,095,835	1,076,568
3) Financial derivative liabilities	114,293	70,275
4) Other provisions	54,555	54,555

<b>Total provisions for risks and charges (B)</b>	<b>1,269,024</b>	<b>1,205,739</b>
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#### C) EMPLOYEE SEVERANCE INDEMNITIES

<b>2,487,676</b>	<b>2,312,384</b>
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#### D) PAYABLES

1) Bonds		
Due within 12 months	909,100	909,100
Due after 12 months	8,636,400	9,090,900
Total bonds	<b>9,545,500</b>	<b>10,000,000</b>
4) Bank debt		



Due within 12 months	3,951,410	4,831,142
Due after 12 months	11,090,587	8,439,239
<b>Total bank debt</b>	<b>15,041,997</b>	<b>13,270,381</b>
<b>5) Payables to other lenders</b>		
Due within 12 months	1,387,855	153,077
Due after 12 months	1,824,581	1,057,872
<b>Total payables to other lenders</b>	<b>3,212,436</b>	<b>1,210,949</b>
<b>6) Advances</b>		
Due within 12 months	814,794	311,099
Due after 12 months	362,206	357,577
<b>Total advances</b>	<b>1,177,000</b>	<b>668,676</b>
<b>7) Payables to suppliers</b>		
Due within 12 months	4,108,126	4,247,286
<b>Total payables to suppliers</b>	<b>4,108,126</b>	<b>4,247,286</b>
<b>12) Tax payables</b>		
Due within 12 months	1,185,390	1,030,945
<b>Total tax payables</b>	<b>1,185,390</b>	<b>1,030,945</b>
<b>13) Due to social security and welfare institutions</b>		
Due within 12 months	771,679	586,676
Due after 12 months	-	21,902
<b>Total due to social security and welfare institutions</b>	<b>771,679</b>	<b>608,578</b>
<b>14) Other debts</b>		
Due within 12 months	2,183,320	2,229,701
<b>Total other debts</b>	<b>2,183,320</b>	<b>2,229,701</b>
<b>Total payables</b>	<b>37,225,448</b>	<b>33,266,516</b>
<b>E) ACCRUALS AND DEFERRALS</b>	<b>7,941,757</b>	<b>8,517,887</b>
<b>TOTAL LIABILITIES</b>	<b>69,964,998</b>	<b>66,203,431</b>

## INCOME STATEMENT

INCOME STATEMENT	30/06/2020	30/06/2019
<b>A) VALUE OF PRODUCTION</b>		
1) Revenues from sales and services	9,573,487	11,872,691
3) Changes in work in process on long-term contracts	(49,960)	(93,190)
4) Increases in fixed assets for internal work	3,110,558	2,762,333
5) Other revenues and income		
Grants for current expenses	-	-
Other	1,098,782	814,099
Total other revenues and income (5)	<b>1,098,782</b>	<b>814,099</b>
<b>TOTAL VALUE OF PRODUCTION</b>	<b>13,732,867</b>	<b>15,355,933</b>
<b>B) COSTS OF PRODUCTION:</b>		
6) For raw, ancillary and consumable materials and goods for resale	539,192	590,724
7) For services	5,726,081	4,766,742
8) For use of third-party assets	1,025,457	889,498
9) For personnel:		
a) Wages and salaries	8,300,109	7,211,810
b) Social security charges	2,248,645	1,958,157
c) Severance pay	307,642	269,005
d) Pension and similar obligations	-	-
e) Other costs	21,302	2,563
Total personnel costs (9)	<b>10,877,698</b>	<b>9,441,534</b>
10) Amortisation, depreciation and write-downs:		
a) Amortisation of intangible fixed assets	3,176,619	3,696,741
b) Depreciation of tangible fixed assets	91,260	93,633

d) Write-down of current receivables and of cash and cash equivalents	-	-
Total amortisation, depreciation and write-downs (10)	<b>3,267,879</b>	<b>3,790,374</b>
12) Provisions for risks	-	-
14) Other operating expenses	125,242	100,481
<b>TOTAL COSTS OF PRODUCTION (B)</b>	<b>21,561,549</b>	<b>19,579,353</b>
<b>DIFFERENCE BETWEEN REVENUES AND COSTS OF PROD.</b>	<b>(7,828,682)</b>	<b>(4,223,420)</b>
<b>C) FINANCIAL INCOME AND CHARGES</b>		
15) Income from equity investments		
From subsidiaries	-	-
Other companies	5,149,911	-
Total income from equity investments (15)	<b>5,149,911</b>	-
16) Other financial income:		
a) From long-term receivables		
From subsidiaries	-	677
From associated companies	-	-
Other	8,735	-
Total financial income from long-term receivables	<b>8,735</b>	<b>677</b>
b) From long-term securities other than equity investments	-	-
c) From securities included in current assets other than fixed assets	-	-
d) Other income		
from subsidiaries	-	-
Other	793	8,150
Total other income (d)	<b>793</b>	<b>8,150</b>
Total other financial income (16)	<b>9,528</b>	<b>8,826</b>
17) Interest and other financial charges	(290,768)	(231,432)

17 bis) Foreign exchange gains and losses	(276,295)	182,661
<b>Total financial income and charges (C) (15+16-17+-17-bis)</b>	<b>4,592,376</b>	<b>(39,944)</b>
<b>D) VALUE ADJUSTMENTS TO FINANCIAL ASSETS AND LIABILITIES:</b>		
18) Revaluations:	-	-
19) Write-downs:	-	-
<b>Total value adjustments to financial assets and liabilities (D) (18-19)</b>	<b>-</b>	<b>-</b>
<b>RESULT BEFORE TAXES (A-B+-C+-D)</b>	<b>(3,236,306)</b>	<b>(4,263,364)</b>
20) Current, deferred and prepaid income taxes for the year		
Current taxes	(1,323)	(614)
Deferred and prepaid taxes	183,828	240,744
<b>Total current, deferred and prepaid income taxes for the year</b>	<b>182,505</b>	<b>240,131</b>
<b>21) Consolidated profit (loss) for the year</b>	<b>(3,053,801)</b>	<b>(4,023,233)</b>
<b>Result attributable to minority interests</b>	<b>-</b>	<b>-</b>
<b>Result attributable to the group</b>	<b>(3,053,801)</b>	<b>(4,023,233)</b>

## CASH FLOW STATEMENT

<b>A. Cash flows from operating activities (indirect method)</b>	<b>30/06/2020</b>	<b>31/12/2019</b>
Profit (loss) for the year	(3,053,801)	(983,007)
Income taxes	(182,505)	203,041
Interest expense/(income)	295,498	557,549
(Dividends)	-	-
(Gains)/Losses on disposal of assets	(5,149,911)	(2,221,171)
<b>1. Profit/(loss) for the year before income taxes, interest, dividends and gains/losses on disposals</b>	<b>(8,090,719)</b>	<b>(2,443,589)</b>

Provisions to funds	342,853	642,178
Amortisation and depreciation of fixed assets	3,267,879	8,297,427
Write-downs for permanent impairment	-	39,555
Value adjustments to asset and liability derivatives not involving cash movements	(44,018)	(31,679)
Other upward/(downward) adjustments for non-monetary items	222,195	(246,318)
<b>Total adjustments for non-monetary items not offset in the net working capital</b>	<b>3,788,908</b>	<b>8,701,163</b>
<b>2. Cash flow before changes in net working capital</b>	<b>(4,301,810)</b>	<b>6,257,574</b>
<b>Changes in net working capital</b>		
Decrease/(Increase) in inventory	49,960	50,704
Decrease/(Increase) in receivables from customers	6,268,350	(4,586,259)
Increase/(Decrease) in payables to suppliers	369,164	1,468,899
Decrease/(Increase) in accrued income and prepaid expenses	7,601	143,622
Increase/(Decrease) in accrued expenses and deferred income	(576,131)	(47,210)
Other decreases / (Other increases) in net working capital	(43,223)	(486,739)
<b>Total changes in net working capital</b>	<b>6,075,720</b>	<b>(3,456,984)</b>
<b>3. Cash flow after changes in net working capital</b>	<b>1,773,910</b>	<b>2,800,591</b>
<b>Other adjustments</b>		
Interest received/(paid)	(295,498)	1,663,622
(Income taxes, paid)	-	-
Dividends collected	-	-
(Use of funds)	(88,464)	(321,103)
Other collections/(payments)	-	-
<b>Total other adjustments</b>	<b>(383,962)</b>	<b>1,342,519</b>
<b>Cash flow from operating activities (A)</b>	<b>1,389,947</b>	<b>4,143,110</b>
<i>Tangible fixed assets</i>		
(Investments)	(74,704)	(188,675)
Divestments	-	-

<i>Intangible fixed assets</i>		
(Investments)	(3,170,820)	(6,453,124)
Divestments	-	-
<i>Financial fixed assets</i>		
(Investments)	(137,180)	(5,562)
Divestments	5,629,486	243,571
<i>Financial assets not held as fixed assets</i>		
(Investments)	-	(101,264)
Divestments	12,608	5,030,871
(Acquisition of subsidiaries net of cash and cash equivalents)		
Disposal of subsidiaries net of cash and cash equivalents		
<b>Cash flow from investing activities (B)</b>	<b>2,259,389</b>	<b>(1,474,183)</b>
<i>Loan capital</i>		
Increase/(Decrease) in payables for bonds	(454,500)	5,000,000
Increase/(Decrease) in short-term bank debt	(148)	(24,422)
Loans taken	4,537,087	8,417,793
(Repayment of loans)	(763,835)	(9,382,062)
<i>Equity</i>		
Capital increase against payment	3,000,000	7,084,420
(Capital repayment)	-	-
Sale (Purchase) of treasury shares	-	-
(Dividends and interim dividends paid)	-	-
<b>Cash flow from financing activities (C)</b>	<b>6,318,603</b>	<b>11,095,730</b>
<b>Increase (decrease) in cash and cash equivalents (A ± B ± C)</b>	<b>9,967,940</b>	<b>13,764,657</b>
Cash and cash equivalents at the beginning of the year	21,647,442	7,882,784
Cash and cash equivalents at year end	31,615,381	21,647,442
<b>Increase (decrease) in cash and cash equivalents</b>	<b>9,967,940</b>	<b>13,764,657</b>

The report allows for an assessment of:

- the Group's cash and cash equivalents produced or absorbed;
- the Group's ability to meet short-term financial commitments;
- the Group's ability to finance itself.

It reconciles the changes that occurred during the year in the Group's equity with the changes in its financial situation.

The generation of cash and cash equivalents compared to the previous year, amounting to Euro 9,967,940, is mainly explained by the financing activity, which includes both the contribution of loan capital (about Euro 3.3 million, net of repayments), and equity (for Euro 3 million). The financial management of operating activities, in turn, generated new liquidity for Euro 1,389,947, as did the flow from investment activities, which was also positive for Euro 2,259,389.

There are no problems with the Group's ability to meet its short-term financial commitments or to finance itself.

With regard to the method used, it should be noted that the Group has adopted the indirect method, in accordance with OIC [Italian Accounting Body] no. 10 standard, whereby the cash flow is reconstructed by adjusting the result for the year in the light of non-monetary components.

## INTERIM MANAGEMENT REPORT

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Dear Shareholders,

this report has been prepared in accordance with the provisions of Art. 40 of Italian Legislative Decree no. 127/1991 and is intended to supplement the consolidated financial statements so as to provide all additional information for a better and clearer understanding of the performance of the consolidated companies, which cannot result from the mere reading of the consolidated financial statements and the notes to the accounts.

### **GROUP STRUCTURE AND BUSINESS**

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Expert System is an Italian company, listed on the AIM of Borsa Italiana (EXSY), with offices in Europe and North America. The company is active in the development of cognitive computing



software that can simulate human understanding, which can be used in the analysis of big data and unstructured information such as documents, news and articles, reports, emails, customer communications. The cognitive approach of Cogito software offers users a greater return on their investments, which is why companies and government agencies choose the solutions offered by Expert System; in fact, the ability to understand, analyse, manage, store, identify and share knowledge is a priority for any modern company that wants to successfully expand its business. The unstoppable increase in content in terms of speed, volume, variety and location is a critical factor that must be addressed to make information usable and remain highly competitive; therefore Cogito, through an in-depth analysis of textual content, transforms data into intelligence by leveraging it throughout the organisation to extract strategic value from available information, becoming a key component for any organisation that wants to discover knowledge, improve customer service and strengthen decision-making processes.

Therefore, the potential of Cogito's technology is very wide-ranging and includes:

### **Knowledge management**

Cogito improves knowledge management processes, making information searchable and shareable with the speed and accuracy that is needed to analyse information on a large scale; it helps companies access and use all available information to support their most strategic activities, increase and share knowledge, increase profits and improve productivity.

### **Customer service**

Cogito's technology, which is essential to personalised and intuitive services (chatbots, automated questions and answers, virtual assistants, etc.), helps organisations simplify access to customer service, both when it is provided directly to customers and when it is taken care of by customer care staff. The fast and accurate understanding of customer requirements, available at any time and on any device, offers a high-level automated customer service experience.

### **Corporate intelligence**

Cogito helps organisations make the most of all kinds of information, including social media information, to obtain strategic market and competitor data. The knowledge extracted from social media, for example, can be used through real-time intelligence activities to identify trends, obtain a thorough understanding of customers and competitors, and make timely and informed decisions.

### **Risk reduction**

Cogito helps organisations identify the right information at the right time: by monitoring thousands of sources, it is able to identify risks before they turn into threats, producing value for risk management strategies; it thus meets the need to become aware, as soon as possible, of any information that might affect global assets or the supply chain, as well as of acts of violence, natural disasters, disruptive innovations or external forces that might impact the market.

### **Process automation**

Cogito's cognitive computing features allow users to automate diverse and complex activities: by applying intelligent automation to complaint management and also to activities such as compliance requirements review, new policies signing, contract monitoring, fraud detection, customer interactions, Cogito provides a measurable ROI in terms of both cost reduction and quality improvement, whilst also ensuring faster and more accurate processing throughout all business processes stages.

In the light of the strong peculiarities of its technological offer, Expert System is chosen by customers who operate profitably in the most varied businesses, including in the following areas:

### **Banks and insurance companies**

Many of the world's leading banks and insurance companies have adopted Cogito technology to develop:

- Cognitive automation solutions for processes that are based on information processing and are particularly burdensome and exposed to human error. Leveraging Cogito's ability to understand texts in a human-like way, many complex tasks are automatically performed,

- such as claim assessment based on insurance coverage, customer support through digital channels and the extraction of the various codes included in health insurance forms;
- state-of-the-art customer support solutions, with a better user experience thanks to interfaces that are mainly based on natural language. The offer of a service that can meet requests, without having to translate them into the complex language of credit institutions, is perceived very positively and is appreciated by customers, as it is intuitive and responds to real needs.
  - operational risk assessment, for example when assessing the risk profile of a loan application;
  - anti-money laundering, through the identification of abstract relationships between illegal behaviour and persons involved in commercial activities, who pretend to act legally.

### **Publishing and media industry**

Expert System's cognitive technology has been chosen by some of the leading organisations in the publishing industry:

- to ensure greater availability of content;
- to develop new products and services;
- to increase opportunities for monetizing articles and news.

Through the understanding of online content, the solutions proposed to the publishing and media industry automatically tag, classify and categorise content, linking it to other relevant texts from the same source or related to other information sources. Cogito technology automates the extraction of entities, relationships, categories and topics in content and optimises the automatic generation of metadata and links based on previously identified tags.

Companies in the sector are thus able to attract new visitors, differentiate products, involve users with personalised experiences and encourage the use of content.

### **Government organisations**

Expert System has many years of experience in working with public administration and government agencies, developing solutions to improve their ability to manage the complexity of information and make it available to serve and protect citizens more effectively.

Research is only one of the areas of improvement related to the implementation of Cogito technology. In fact, the ability to accurately identify relevant entities and categorise content as it changes makes it possible to extend and make more accessible the large amount of information collected by the public administration.

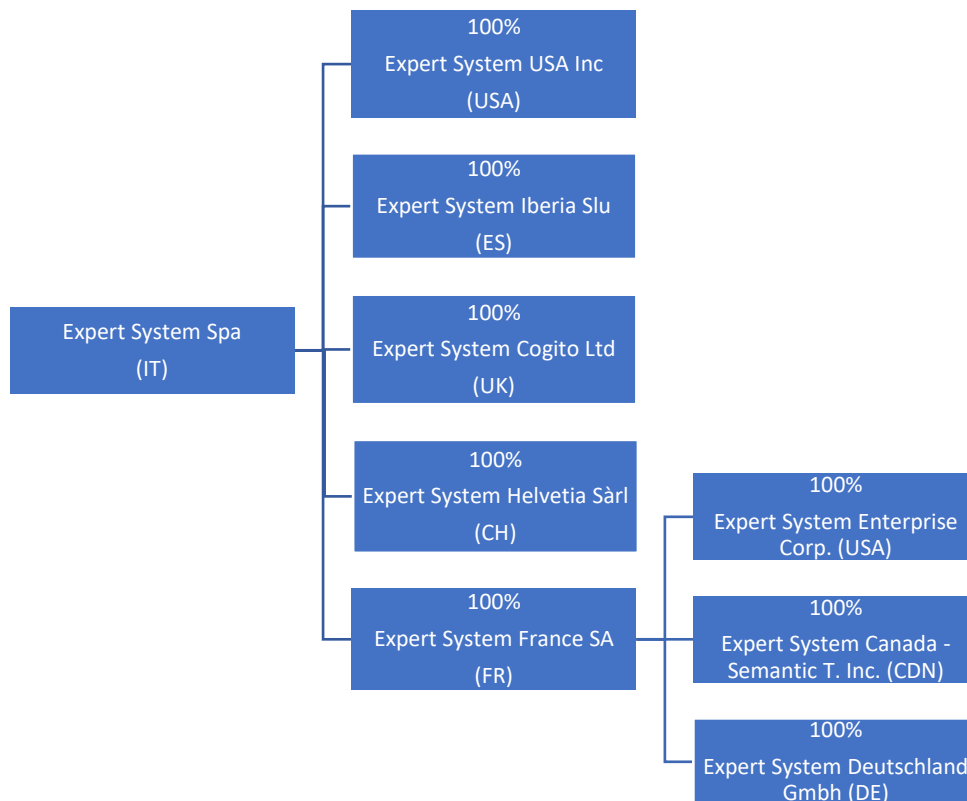
### **Energy**

Thanks to its extensive and consolidated experience gained in the energy sector, working with some of the world's largest and most important companies in the energy field, Expert System is not only familiar with the typical language of the sector, but also with the type of challenges it has to face.

For an industry characterised by huge amounts of information, unique vocabulary and reliance on data-based decision-making, Cogito cognitive technology offers a knowledge graph (Sensigrapher) that includes a rich and scientifically specific industry ontology based on millions of definitions of words and concepts related to millions of other relationships. This ensures that all data are defined in the context of the project domain and are fully available and accessible via searches.

With Cogito, knowledge stored in different record management applications is made immediately available to all knowledge management applications; the tagging of over a billion documents for some of the world's largest companies in the energy industry offers customers the chance to automatically extract and tag virtually any size, connect similar concepts from disparate sources to make information understandable and usable by all applications, and identify patterns in information and capture critical signals that improve predictive analysis patterns.

Over the last few years, the Group has consolidated its physiognomy as a company offering services to corporate and government intelligence, taking on the structure represented by the following chart:



The current corporate organisational chart differs from that as at 31/12/2019 due to two significant changes that took place during the six-month period, listed below:

- in March the subsidiary Expert System Helvetia Sàrl, with headquarters in Geneva, was established, 100% controlled by Expert System S.p.A. With the newco, the Group intends to consolidate its position in the artificial intelligence sector, establishing a direct presence in one of the world's leading financial and insurance markets, also a centre of interest for Pharma and major international organisations;
- on 19/06/2020 Expert System announced the total sale of its minority shareholding equal to approximately 17% of the share capital of CY4Gate S.p.A., a company established in 2014 with Elettronica S.p.A., which operates in the cybersecurity industry in all-around mode, designing, developing and producing “Cyber Intelligence & Cyber Security”. On 17/06/2020, CY4Gate S.p.A. submitted an application for admission to trading of its ordinary shares on AIM Italia, a multilateral trading system organised and managed by

Borsa Italiana S.p.A. With a total collection of € 21.1 million and the determination of the price of ordinary CY4GATE S.p.A. shares at € 3.15, the shareholding of Expert System equal to 1,706,469 shares was sold for a consideration of € 5,375,377.35 (the capital gain was allocated to consolidated income statement item A15).

The Expert System group currently has a global presence and infrastructure, with offices in Italy, Spain, France, Germany, UK, Switzerland, USA and Canada:



## OPERATING CONDITIONS AND BUSINESS DEVELOPMENT

*(Art. 40, paragraph 2, letter c, of Italian Legislative Decree no. 127/91)*

Artificial intelligence, automation and robotics play an increasing role in the way companies interact with customers and employees.

According to Gartner IDC<sup>1</sup>, the well-known analyst, worldwide spending on artificial intelligence (AI) systems should reach \$ 97.5 billion in 2023, with a CAGR of 28.5% between 2018 and 2023.

<sup>1</sup> Source: "Worldwide Spending on Artificial Intelligence Systems Will Be Nearly \$98 Billion in 2023, According to New IDC Spending Guide"

The results show that organisations across all sectors use AI in a variety of applications: the sectors that invest the most are Financial Services and retail, with spending of over \$ 5 billion.

50% of retail spending is focused on customer experience.

Financial Services focus on anti-fraud and risk prevention systems.

Forrester<sup>2</sup>, a leading independent technology solutions research firm, estimated that the RPA market would reach \$ 1.7 billion by the end of 2019. The available data show that the \$ 1.4 billion threshold has been reached and the significant growth trend is continuing with a CAGR of 40% between 2020 and 2027 thanks to the ability of RPA technology to support daily and repetitive activities of employees whilst improving customer experience<sup>3</sup>.

According to Forrester, the value of these technologies, which are to be considered relatively recent, will be taken into consideration by an increasing number of organisations, to encourage a better involvement of customers and employees; Forrester itself mentions the multinationals Blue Prism and UiPath, which have signed strategic partnerships with Expert System. In addition to these partnerships, there is also the one with Automation Anywhere and Cofax signed in 2020, the third and fourth player in this significant market segment.

The performance of the Expert System share price as of 25/09/2020 is shown below:

Market	AIM Italia - MAC
Share capital	€ 503,864
Capitalisation	€ 117,355,060
Minimum lot	1.00
Reference price	€ 2.31 – 25/09/2020 h 17.25.28
Official price	€ 2.3291 – 24/09/2020
Performance - 1 month	- 15.54%
Performance - 6 months	+ 9.71%
Performance - 1 year	- 29.64%

<sup>2</sup> Source: The Forrester Tech Tide™: AI, Automation, And Robotics For Customers And Employees, Q2 2019 (May 2019)

<sup>3</sup> Source: Robotic Process Automation Market Size, Share & Trends Analysis Report By Type (Software, Service), By Application (BFSI, Retail), By Organization, By Service, By Deployment, By Region, And Segment Forecasts, 2020 - 2027

With reference to the main events that affected the Expert System group during the six-month period, the following should be noted:

- on 04/05/2020 the Board of Directors of Expert System, executing the power granted by the Extraordinary Shareholders' Meeting on 18/04/2019 pursuant to Article 2443 of the Italian Civil Code, with the deed drawn up by Notary Rolando Rosa, index no. 124848, collection no. 22626, approved a divisible share capital increase, excluding pre-emption rights, for a total maximum amount of Euro 2,999,999.70, by issuing a maximum of 1,111,111 ordinary shares with no par value, to be offered for subscription exclusively to two institutional investors:
  1. Indaco Venture Partners SGR (for an amount of Euro 1,999,998.00 with the issue of 740,740 shares);
  2. Invesco (for an amount of Euro 1,000,001.70 with the issue of 370,371 shares).The newly issued shares were offered at a subscription price of Euro 2.70 per share, of which Euro 0.01 is to be allocated the share capital increase and Euro 2.69 to the share premium reserve;
- on 29/06/2020, with the Extraordinary Shareholders' Meeting deed drawn up by Notary Rolando Rosa, index no. 125011, collection no. 23375, a divisible capital increase and/or the issue of convertible bonds for a maximum amount of Euro 25,000,000, including share premium, were resolved, with delegation to the Board of Directors pursuant to Articles 2443 and 2420 ter of the Italian Civil Code, by issuing new ordinary shares with no par value, excluding the pre-emption right under Article 2441, paragraph 5, of the Italian Civil Code, within five years of the corresponding resolution. The resolutions passed at the said Extraordinary Shareholders' Meeting were therefore implemented by the Board of Directors in the following month of July: for a description of these events, please refer to the section "Significant events occurred after 30/06/2020" in the final part of the Notes to this Half-Yearly Report;
- on 29/06/2020, the Shareholders' Meeting approved the "2020-2023 Stock Grant Plan" and the related free capital increase, intended for the employees of Expert System S.p.A. and its subsidiaries, which provides for the free assignment of a maximum of 3,200,000 rights



to receive, free of charge (at a 1:1 ratio) as many ordinary shares of the Issuer, subject to the achievement of certain performance and/or personal targets in each of the four financial years ending on 31 December 2020, 2021, 2022 and 2023, respectively. This plan is a useful and suitable tool for promoting attraction and retention policies aimed to retain core personnel and to attract new highly qualified professionals to support the implementation of the objectives of the 2020-2024 Strategic Plan.

- On 29/06/2020, the "2020-2023 Stock Option Plan" and the related paid capital increase was also approved, intended for members of the Board of Directors, collaborators and consultants and employees of Expert System S.p.A. and its subsidiaries, the purpose of which is the free assignment of 1,800,000 pre-emption rights conditional on the subscription, at a previously established price, of Expert System ordinary shares (at a 1:1 ratio). The vesting of such pre-emption rights is subject to the achievement of certain performance and/or personal targets established from time to time for each beneficiary. This plan is also a tool aimed at achieving the direct involvement of individuals who contribute to the growth and development of the Company and the Group in the value creation process.
- on the same occasion, the Extraordinary Shareholders' Meeting resolved to revoke, for the unused part equal to Euro 0.10, the power to increase the share capital and to issue convertible bonds pursuant to Articles 2443 and 2420-ter of the Italian Civil Code delegated to the Board of Directors by resolution of the Extraordinary Shareholders' Meeting on 18 April 2019, approving the ensuing amendment to Article 5 of the Articles of Association.

On 24 February 2020, the Board of Directors of Expert System announced that Walt Mayo had been appointed Chief Executive Officer of the Group (Group CEO). With more than 20 years of experience in sales, marketing and strategic guidance of development channels, Walt will play a key role in the expansion of the company's business in the USA and will be responsible for leading Expert System into a new phase of global growth.

The goal is to leverage Expert System's approach to artificial intelligence, based on pragmatism, transparency and a clear and robust return on investment, strengthening its share of recurring

licenses and further focusing on the development of platform scalability. With a comprehensive on-premise and cloud offering, the company's marketing and sales capabilities are being enhanced, starting from the US, to become the global benchmark for all business needs related to natural language understanding and processing.

With the aim of strengthening global operations and increasing synergies between countries, Expert System appointed Gabriele Donino as Group Chief Operating Officer (COO). Thanks to his deep experience gained in technology and delivery processes for the insurance market using also artificial intelligence, Gabriele is instrumental in enhancing the scalability of all operations and delivery activities. In the current growth phase of Expert System, his contribution makes the implementation of projects more effective and efficient, helping customers and partners to fully exploit the platform's potential.

On 9 June 2020, the Board of Directors of Expert System approved its 2020-2024 Path to Lead Strategic Plan aimed at significantly accelerating the Group's global growth in the rapidly expanding market of artificial intelligence, aiming to achieve revenues of Euro 100 million (32% CAGR) in 2024 with EBITDA of Euro 22 million.

In particular, the Company aims to significantly increase the SaaS/Recurring component of total revenues, reaching a 79% share (63% CAGR) in 2024. The SaaS/Recurring component from the United States for 2024 is 52% of total revenues (116% CAGR). As a result, Professional Services revenues will fall steadily to around 13% in 2024 from the current 36%.

The Strategic Plan, whose implementation began as early as the second half of 2020, provides for investments in core technology so that it becomes the most intuitive, robust and complete artificial intelligence platform for language understanding on the market. Expert System's main focus will be on optimising its platform and all proprietary software development features, with the aim of making the adoption of artificial intelligence easier and more pervasive. Leveraging a "simple to design, build and operate" approach, i.e. an approach aimed at making the implementation of artificial intelligence easy to design, develop and manage, Expert System intends to become the global reference platform in the artificial intelligence market for Natural Language Understanding and Processing. The platform will allow everyone to work in a simple and fast way that is suitable for every level of user experience, without necessarily having to be an expert in machine learning

or linguistics: at the same time, experts will find in the platform all the necessary features to solve even the most complex problems in an effective and innovative way.

Leveraging the tremendous knowledge acquired over the years in the implementation of hundreds of artificial intelligence projects, together with simplified tools and workflows for the development of business solutions or integration into other technologies, the aim is to accelerate time-to-value in all vertical sectors in which Expert System works as well as in a wider market of users. Through a strategy linked to the development of intelligent software for NLU/NLP, Expert System aims to scale business faster and more efficiently than companies based on other technological approaches.

The Strategic Plan envisages a particular focus on the US market, which is believed to be the one with the highest potential, with wide development margins, and an ecosystem that is fertile for innovation and favourable to the rapid scalability of business. The Company is making strong investments in the Go-to-Market strategy through the recruitment of high-level professionals, particularly in the sales & marketing area.

Lastly, the indirect partner channel is also a key part of Expert System's Go-to-Market strategy to expand the company's reach and support customers in their extensive digital transformation processes.

Expert System's strategic plan is developed in three phases:

- the first phase, covering 2020-2021, will focus on the set-up of the Go-to-Market strategy and the new platform underpinning the plan. The implementation of this phase is heavily affected by the high degree of uncertainty caused by the crisis linked to COVID-19 all over the world, whose impacts are currently difficult to predict;
- the second phase, which will develop over the 2022-2023 two-year period, will be characterised by high growth rates as a result of the investments made in both sales & marketing (in terms of human resources and projects) and technology;
- in the third phase, starting in 2024, we will begin to reap the significant benefits of the Plan with a strong increase in revenues and above all margins, generating positive cash flows.

The Company is planning major investments in R&D, amounting to approximately Euro 50 million, and an unprecedented focus in the Company's history on sales & marketing activities, with investments amounting to approximately Euro 117 million.

Expert System pursues its commitment to ensure the effectiveness of intelligence activities by exploiting its advanced artificial intelligence algorithms to simplify the acquisition and analysis of information and to increase the ability to identify, categorise and correlate potentially relevant knowledge. In the last decades, global changes have fostered the development of new knowledge and technologies to improve health and well-being. At the same time, they have led to the emergence of unexpected risk scenarios related to conflict, instability, terrorism and public health threats (such as SARS, MERS-CoV, COVID-19). Therefore, it is essential to understand how scientific and technological development will affect the protection of citizens and the environment.

In this context, Expert System, in collaboration with the CBRNe - OSDIFE Security and Defence Observatory, the Department of Electronic Engineering of the "Tor Vergata" University of Rome and the University Security Training Centre of the State University of the Republic of San Marino, is standing out as the Italian counterpart of a vast international project aimed at the application of cognitive computing technologies to the investigation of threats caused by hazardous substances or contaminants (CBRNe, Chemical Biological Radiological Nuclear or/and explosive).

The partnership aims to produce and disseminate "knowledge" in the CBRNe field, identifying in advance all information whose evidence is not yet immediate (weak signals) and all data that are likely to be considered non-existent simply because of the impossibility of developing effective research, correlation and verification activities (false negatives). In fact, regardless of the type of event (natural, accidental or terrorist event), the definition of the best prevention strategies is strictly correlated to the capacity to handle the enormous quantities of data useful to assess risks, including those of a biological nature (as in the case of the "Coronavirus") which have recently stimulated, at a global level, the need for greater attention on the part of governments and the business world.

In particular, Expert System and the CBRNe - OSDIFE Security and Defence Observatory have developed a technological platform to improve risk analysis related to the spread of biological, chemical and radiological agents, as well as explosive substances, to promote shared access to

new knowledge and foster the best strategies for the protection of people, the environment and infrastructure.

In March 2020, Expert System participated as a member to the establishment of the Italian Insurtech Association (IIA), the non-profit entity that brings together insurance companies and brokers, banks and financial intermediaries, technology and service providers to promote the development of the digital insurance market. The founding members of IIA - ten managers and companies in the insurance sector - were joined by partners representing all the entrepreneurial and professional components of the insurtech industry, such as Swiss Re, EY, BNP Paribas, Net Insurance, Expert System. IIA proposes technical training, the sharing of technological best practices, the generation of synergies between members and the dialogue with national and international institutions. A systemic mission that is summarised in the claim "Enabling Insurtech Ecosystems" and pursued in synergy with the Global Insurtech Association, an international network of associations including IIA.

Italians increasingly use digital services and expect to access insurance services in an immediate, secure and multi-channel way, at any time from anywhere in the world. Therefore, the Italian insurance industry has a historic growth opportunity that can be seized by accelerating the innovation of offer/service models and by increasing investments in line with new consumer trends.

The establishment of IIA is a concrete sign of how innovation and collaboration can create the necessary ecosystem in Italy to redesign the insurance world and keep it in step with the increasingly challenging needs of users.

During the first half of 2020, Expert System joined the fight against COVID-19 by providing biomedical researchers worldwide with free access to its Clinical Research Navigator (CRN) artificial intelligence application. To address an unprecedented global health emergency such as COVID-19, there is an urgent need for advanced artificial intelligence technologies that can help researchers accelerate their research into therapies and diagnostics.

CRN contains a real-time structured data set of over 100 million documents and reference information on 12 million clinical researchers, providing biomedical research scientists with a unique platform to find useful information supporting their research activities.

CRN constantly monitors and extracts biomedical content from the broadest and most comprehensive set of sources such as Medline publications, clinical studies, National Institute of Health (NIH) funded research, US patents, news and even social media streams. It aggregates information from millions of scientific papers and press releases, structuring content into a simple and intuitive interface and enabling drill-down searches at multiple levels and in all available fields. Searches can be carried out with regard to diseases, drugs, mechanisms of action, organisations, researchers and geographical areas.

With the aim of strengthening its network of strategic partners in Italy, Expert System has entered into an important partnership with Lutech, a Group that develops end-to-end solutions for digital evolution, which will therefore be able to use Expert System solutions to support its services based on Artificial Intelligence.

Specifically, thanks to its partnership with Expert System, Lutech greatly simplifies the text analysis process to extract entities from unstructured text, the attribution of the correct meaning of content based on its context as well as the understanding and automatic processing, through semantic analysis, of the enormous flow of unstructured data processed daily.

Expert System has partnered with SDL, an LSE-listed company and a leader in content creation, translation and distribution, to enhance the Cogito® artificial intelligence platform with machine translation capabilities provided by SDL, extending intelligent process automation and the scope of knowledge discovery to other languages.

SDL's neural machine translation capabilities can be integrated into Expert System's Artificial Intelligence platform in both cloud and on-premise mode, giving customers a flexible infrastructure as well as full control over data management and security.

Expert System has signed a new partnership with Bizmatica, a company at the forefront of national and international innovation with a strong specialisation in Customer Management and Operational Efficiency.

Bizmatica's skills and portfolio are therefore enriched with leading solutions in the field of Artificial Intelligence, opening up new development and integration scenarios for operations and customer service, supporting customer change requests along the entire value chain: from specialised

consulting to design, from solution implementation to management, integrating all front office processes.

Expert System and UTWIN, a French broker specialising in loan insurance, have set up a partnership to improve UTWIN's underwriting activities. Thanks to Expert System's Artificial Intelligence platform, UTWIN will be able to significantly improve its customers' experience, reducing response times, especially for the analysis of medical reports, and increasing the quality of its services.

ING Direct has implemented Expert System's Artificial Intelligence technology to enhance business automation processes and improve back office performance. With this implementation, the ING Direct centres in the Netherlands dedicated to customer interaction take advantage of the benefits of automated email management, based on the ability to automatically process 100% of communications reliably and accurately. The next objective will be to extend these benefits to the ING Direct centres in Belgium and other countries where ING Direct operates. The ability to understand the content of business documents is a key factor in maximizing the ROI of Robotic Process Automation (RPA) investments, extending the benefits of automation to processes that require the ability to accurately understand, classify, correlate, and extract "knowledge" from captured data. By integrating RPA bots with artificial intelligence applied to NLU, Expert System supports ING Direct to reduce manual tasks and extend the scope and accuracy of process automation to more complex use cases. ING Direct has thus extended the efficiency of its back office while optimising decision-making processes and customer services.

The independent research company Forrester Research included the Cogito® platform in its new report "Now Tech: AI-Based Text Analytics Platforms, Q2 2020", confirming Expert System as one of the world's leading vendors of artificial intelligence applied to text analysis.

The objective of Forrester's research is to offer text analytics experts and professionals an overview of the full potential offered by artificial intelligence platforms for text analysis: from business documents circulating in the company to any type of unstructured data and information available online.

Forrester Research also included Expert System in the two reports dedicated to artificial intelligence technologies for text analysis: "The Forrester Wave™: AI-Based Text Analytics Platforms, Q2 2020", People-Focused and Document-Focused\*. Based on 27 evaluation criteria for

People-Focused text analytics platforms, Forrester identified 8 main suppliers. While for Document-Focused text analytics platforms, 9 leading vendors were evaluated according to 26 criteria. In both assessments, Expert System scored highest for its analysis capability with regard to documents and between different documents, its Graphical User Interface (GUI) and collaboration features. As for the knowledge graph, according to Forrester: "it is particularly interesting, available in 12 languages, supporting full Natural Language Processing functionality, including disambiguation." In the evaluation part focused on customers' opinions, Expert System was awarded the highest score for its multilingual capability, ontology richness and the time-to-value of its artificial intelligence platform.

## **OPERATING PERFORMANCE**

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*(Art. 40, paragraph 1 of Italian Legislative Decree no. 127/91)*

### **General economic performance**

Since the early months of 2020, the effects of the Covid-19 pandemic have had an impact on production activity and aggregate demand of the economies of all countries in the world, starting with China, where the outbreak of the pandemic began, suggesting that there will be a very sharp reduction in world trade this year. The deterioration in growth prospects has translated into a marked fall in stock market indices and into a sudden increase in volatility and risk aversion. In all the leading economies, the monetary and fiscal authorities have enacted strong expansionary measures to provide income support to households and firms, credit to the economy, and to bolster market liquidity.

After a more rapid start in Italy, the epidemic spread to all the euro-area countries. In line with the drop in production and aggregate demand, and the fear of permanent consequences for the economy, inflation expectations were markedly lower across all horizons. The ECB Governing Council took decisive action to ease monetary conditions, adopting a comprehensive package of measures, including more expansionary refinancing operations to support firms' liquidity and a new pandemic emergency asset purchase programme that will counter the widening of yield



spreads. The Council also declared that it stood ready to use again all of its instruments and to do everything necessary to support the economy.

The contraction in economic activity and international trade intensified in April. Since May the epidemic has intensified in some emerging economies and the United States. Expansionary monetary and fiscal measures and the gradual easing of the suspension of business have reduced tensions in the financial markets, but they remain extremely sensitive to reports of contagion.

In the euro area, after a further decline in April, available indicators suggest a partial recovery in activity in May and June (data still under review at the time of writing). Inflation has fallen to barely positive values. The Governing Council of the ECB has decisively strengthened its expansionary monetary policy stance by broadening the size and time horizon of the purchasing programme aimed at countering the effects of the pandemic, which will continue until the crisis is over. The likelihood of negative changes in consumer prices in the euro area over the coming years, inferred from option prices, peaked at the end of March and declined after ECB intervention.

In Italy, the fall in gross domestic product, which was 5.3% in the first quarter, apparently intensified in the second quarter, according to information currently available, amounting to around 10%. This estimate reflects, above all, a very unfavourable trend in April; motorway transport, electricity and gas consumption indicate that a recovery in activity began in May, aided by the progressive lifting of suspension measures. Corporate purchasing managers' indices have risen but still remain below the expansion threshold.

Italy's trade in goods and services continued to suffer from the repercussions of the epidemic on world trade in the second quarter as a whole. In May, however, our sales on markets outside the European Union partly recovered from the previous decline.

The deterioration in labour market conditions due to the health emergency resulted in a sharp drop in hours worked in the first quarter (-7.5 %); the impact on the number of employees, which fell by 0.3 %, was significantly mitigated by the exceptional increase in the use of social safety nets. The impact of mobility restrictions on the number of jobseekers is reflected in the unemployment rate, which has fallen sharply. The most recent data point to a halt in the unemployment rate fall and to recovery in the number of active persons in the labour market.

In Italy the change in consumer prices was negative in May and equal to -0.4% in June, mainly due to the sharp reduction in the price of energy goods. Looking ahead, the fall in domestic demand is affecting the inflation expectations of analysts and businesses: according to traders, consumer prices will fall to this year's average and will rise very little in the coming year. Surveys conducted in March and May, on the other hand, temporarily increased household inflation expectations, which were mainly affected by food price trends; however, the increase ceased in June.

Financial market conditions remain fragile, but have benefited from interventions by monetary and fiscal authorities and the easing of measures to contain the pandemic. In the euro area, the strengthening of the ECB's purchasing programme and the European Commission's proposal for an instrument, called the Next Generation EU, to finance recovery in the EU countries through loans and transfers, have had favourable effects on share prices and interest rates; the new instrument should considerably increase the EU's budgetary capacity to counter the consequences of the pandemic. Yields on Italian government bonds have fallen, as have the financing costs of companies and banks. Bond issuance activity has resumed, also encouraged by Eurosystem purchases.

The measures taken by the ECB and the government have supported corporate credit, which has accelerated as the liquidity needs have increased sharply. In Italy, the growth in business loans, which was negative throughout the previous year, reached 11.5% in May (year-on-year over three months). The expansion in lending, which initially involved medium-large companies, was then extended to producer households with the progressive reduction of delays in the implementation of the measures adopted by the Executive.

Looking at the scenario for the Italian economy in the 2020-22 three-year period, which takes into account a basic context in which the spread of the pandemic is assumed to remain under control globally and in Italy, GDP should fall by 9.5% on average this year, entirely due to the reduction in the first half of the year, and should recover over the next two years (4.8% in 2021 and 2.4% in 2022). The recovery should be gradual: persistent effects on household consumption will come from the decline in employment and disposable income, although mitigated by support measures; the worsening of demand prospects and business confidence will affect investments, whose fall in

2020, reported also by Bank of Italy surveys, will be partly recovered in 2021-22. Inflation will be almost zero this year and next; prices will rise again in 2022, by 1.0%.

Worse developments than those outlined in the baseline scenario might occur in case of new epidemic outbreaks at national or global level, which might affect household and business confidence and spending decisions and result in a greater decline in world trade, disruptions in global production chains or a deterioration in financial conditions. In a worse scenario, it is estimated that production could fall by more than 13% this year and recover in the next two years to a more moderate extent compared to the baseline scenario.

However, an improvement in growth prospects compared to the scenarios outlined here might result from the strengthening of the expansionary policies currently under consideration. The approval and effective use of the instruments under discussion for the European Union might not only have a direct impact on demand and production capacity, but might also contribute to a recovery in the confidence of households and businesses. The amount of resources available will depend on the ability to propose and implement sound reforms and investment projects.

*(Source: Bank of Italy Economic Bulletin 2 -3/2020)*

### Operating performance of the Expert System Group

*(Art. 40, paragraph 1 of Italian Legislative Decree no. 127/91)*

The consolidated half-yearly financial report as at 30 June 2020, which includes the consolidated figures of the subsidiaries included in the scope of consolidation, as well as those of the parent company Expert System S.p.A., shows what follows (figures in Euro):

CONSOLIDATED FIGURES OF EXPERT SYSTEM GROUP			Main economic data	EXPERT SYSTEM S.P.A.		
H1 2019	H1 2020	CHANGE		H1 2019	H1 2020	CHANGE
15,355,933	13,732,867	(11%)	Value of production	9,952,617	10,335,548	4%
(433,046)	(4,560,803)	> 100%	Gross operating margin (EBITDA)	723,167	(986,409)	> -100%
(4,223,420)	(7,828,682)	85%	Operating result (EBIT)	(896,591)	(2,809,651)	> -100%

(4,023,233)	(3,053,801)	(24%)	Net result	(974,927)	2,117,067	> 100%
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In order to provide a better picture of the performance and results of operations, the tables below show an Added Value reclassification of the Income Statement, a reclassification of the Balance Sheet by functional area and on a financial basis and the most significant financial statement ratios.

## Main economic data

*(Art. 40, paragraph 1-bis of Italian Legislative Decree no. 127/91)*

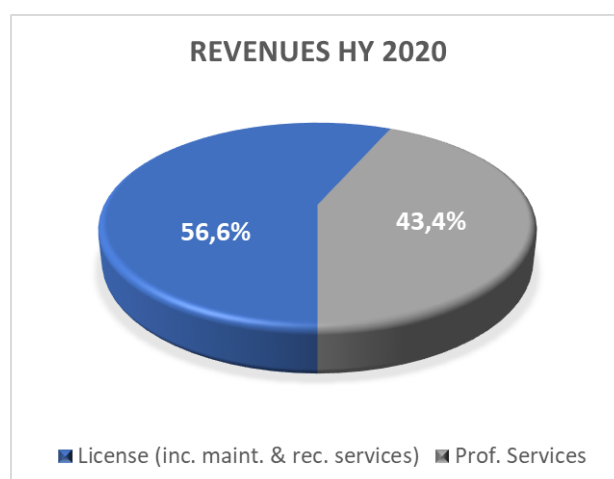
The reclassified income statement of the Expert System Group is as follows (in Euro).

Consolidated Income Statement	30/06/2020	30/06/2019	Change
Revenues from sales	9,573,487	11,872,691	(2,299,204)
Change in inventories	(49,960)	(93,190)	43,231
Increase in fixed assets for internal work	3,110,558	2,762,333	348,225
Other income	1,098,782	814,099	284,683
<b>Value of operating production</b>	<b>13,732,867</b>	<b>15,355,933</b>	<b>(1,623,066)</b>
External operating costs	(7,415,971)	(6,347,444)	(1,068,527)
<b>Added value</b>	<b>6,316,896</b>	<b>9,008,488</b>	<b>(2,691,593)</b>
Personnel costs	(10,877,698)	(9,441,534)	(1,436,164)
<b>Gross Operating Margin</b>	<b>(4,560,803)</b>	<b>(433,046)</b>	<b>(4,127,757)</b>
Depreciation and provisions	(3,267,879)	(3,790,374)	522,495
<b>Operating Result</b>	<b>(7,828,682)</b>	<b>(4,223,420)</b>	<b>(3,605,262)</b>
Result of the financial area	4,592,376	(39,944)	4,632,320

<b>Ordinary Result</b>	<b>(3,236,306)</b>	<b>(4,263,364)</b>	<b>1,027,058</b>
Result of the extraordinary area	-	-	-
<b>Result before taxes</b>	<b>(3,236,306)</b>	<b>(4,263,364)</b>	<b>1,027,058</b>
Income taxes	182,505	240,131	(57,626)
<b>Net result</b>	<b>(3,053,801)</b>	<b>(4,023,233)</b>	<b>969,432</b>

Revenues as at 30 June 2020 amounted to Euro 9,573,487, down 19.2% compared to the figure as at 30 June 2019 (Euro 11,872,691) mainly due to the general economic recession caused by the Covid-19 pandemic. It should be noted that interim revenues were particularly affected by the postponement of projects, potentially altering, even significantly, temporary results.

The graph below shows that 56.6% of revenues are related to licensing and maintenance and 43.4% to professional services:

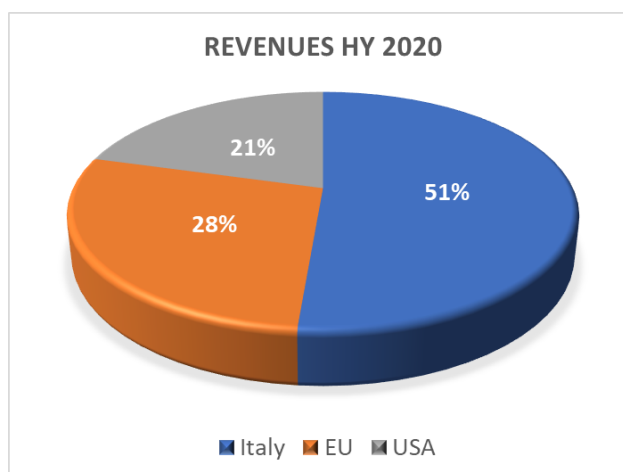


The importance of the component linked to the sale of licences and maintenance guarantees higher margins, since it is not directly linked to the incurring of variable costs.

The breakdown of licence revenues as at 30 June 2020 also shows the clear predominance of the recurring component of licence revenues, reaching 78% from 76% as at 31 December 2019,

compared to the perpetual component. This ensures greater stability of revenues and cash flows over time.

The following is a breakdown of revenues by geographical area based on the nationality of the Group companies' customers:



With regard to the other items included in Value of Production, the increase in fixed assets for internal work, represented by investments in research and development, amounted to Euro 3,110,558 as at 30 June 2020, up compared to 30 June 2019 (Euro 2,762,333), giving evidence of Expert System's strong focus on the development of its technology.

The decrease in EBITDA in the first half of 2020 compared to the first half of 2019 is due to the combined effect of:

- the drop in revenues, mainly due to the crisis caused by the COVID-19 pandemic;
- the increase in personnel costs to implement the "Path to Lead" Strategic Plan
- one-off costs related to the sale of the shareholding in CY4Gate (about Euro 380,000).

EBIT was negative by Euro 7,828,682, against amortisation of intangible assets for Euro 3,176,619, mainly relating to capitalised development costs, the amortisation of which amounts to Euro 2,501,207.

Financial management showed a positive result of Euro 4,592,376 (negative by Euro 39,944 as at 30 June 2019), essentially due to the significant capital gain on the sale of the minority shareholding in CY4Gate S.p.A. (equal to Euro 5,149,911).

Net result posted a Euro 3,053,801 loss (Euro 4,023,233 as at 30 June 2019).

The company's income situation is further specified by the profitability ratios set out in the table below:

Profitability ratios	30/06/2020	30/06/2019
Net ROE	(0.13)	(0.18)
Gross ROE	(0.13)	(0.19)
ROI	(0.45)	(0.18)
ROS	(0.82)	(0.36)

### Main balance sheet data

The company's reclassified balance sheet compared with that as at 31/12/2019 is as follows (in Euro):

Consolidated Balance Sheet	30/06/2020	31/12/2019	Change
Net intangible fixed assets	13,085,979	13,091,778	(5,799)
Net tangible fixed assets	685,111	701,666	(16,555)
Equity investments and other financial fixed assets	4,155,806	4,489,459	(333,653)

<b>Fixed capital</b>	<b>17,926,896</b>	<b>18,282,903</b>	<b>(356,007)</b>
Short-term financial assets	-	-	-
Inventories	8,649	58,608	(49,960)
Receivables from customers	14,178,623	20,446,973	(6,268,350)
Other receivables	5,793,592	5,305,441	488,152
Accrued income and prepaid expenses	425,867	433,468	(7,601)
<b>Short-term operating assets</b>	<b>20,406,732</b>	<b>26,244,489</b>	<b>(5,837,758)</b>
Payables to suppliers	(4,108,126)	(4,247,286)	139,160
Advances	(814,794)	(311,099)	(503,695)
Tax and social security payables	(1,957,069)	(1,617,620)	(339,449)
Other debts	(2,183,320)	(2,229,701)	46,382
Accrued expenses and deferred income	(4,205,796)	(4,210,877)	5,081
<b>Short-term operating liabilities</b>	<b>(13,269,105)</b>	<b>(12,616,584)</b>	<b>(652,521)</b>
<b>Net working capital</b>	<b>7,137,627</b>	<b>13,627,906</b>	<b>(6,490,279)</b>
Severance pay	(2,487,676)	(2,312,384)	(175,292)
Tax and social security payables due after 12 months	-	(21,902)	21,902
Accrued expenses and deferred income due after 12 months	(3,735,960)	(4,307,010)	571,050
Other medium and long-term liabilities	(1,631,230)	(1,563,316)	(67,915)



<b>Medium-term liabilities</b>	<b>(7,854,868)</b>	<b>(8,204,612)</b>	<b>349,744</b>
<b>CAPITAL EMPLOYED</b>	<b>17,209,655</b>	<b>23,706,197</b>	<b>(6,496,542)</b>
Shareholders' Equity	(21,041,093)	(20,900,905)	(140,188)
Net financial position in the medium and long term	(21,551,568)	(18,588,011)	(2,963,557)
Short-term net financial position	25,383,006	15,782,719	9,600,286
<b>EQUITY AND NET FINANCIAL DEBT</b>	<b>(17,209,655)</b>	<b>(23,706,197)</b>	<b>6,496,542</b>

Fixed capital amounted to Euro 17,926,896 (Euro 18,282,903 as at 31 December 2019), a decrease of Euro 356,007 mainly due, for Euro 251,266, to the reduction in financial fixed assets related to the sale of the shareholding in CY4Gate.

Looking at current operations, there was a reduction of Euro 5,837,758 mainly due to the combined effect of the decrease in trade receivables for Euro 6,268,350 and the increase in other receivables for Euro 488,152. The increase in other receivables is mainly due to the increase in tax receivables for Euro 852,063, the increase in advances to suppliers for Euro 431,803 and the reduction in receivables for grants for research projects for Euro 833,016.

Short-term liabilities for the year are characterised by an increase of Euro 652,521 mainly due to the Euro 481,495 increase in advances on grants for research projects.

Therefore, net working capital is Euro 6,490,279 lower than the previous year. In any case, the largely positive value of net working capital makes it possible to report substantially balanced operations, in which short-term assets are compared with short-term liabilities.

Medium and long-term liabilities decreased by Euro 349,744 mainly due to the Euro 175,292 reduction in the severance pay provision.

To better describe the equity balance of the company, the table below shows some financial statement ratios relating to both (i) the methods of financing medium/long-term investments and (ii) the composition of the sources of funding, compared with the same ratios for the consolidated financial statements as at 31/12/2019.

Fixed asset financing ratios	30/06/2020	31/12/2019
Fixed asset to equity capital margin	3,114,196	2,618,001
Fixed asset to equity capital ratio	1.17	1.14
Fixed asset to equity capital and medium-long term debt margin	28,784,672	25,081,711
Fixed asset to equity capital and medium-long term debt ratio	2.61	2.37

Financing structure ratios	30/06/2020	31/12/2019
Liabilities within 12 months (A)	15,311,674	14,299,026
Liabilities after 12 months (B)	25,670,475	22,485,612
Equity (C)	21,041,093	20,900,905
<b>Total debt ratio (A+B)/C</b>	<b>1.95</b>	<b>1.76</b>

The fixed asset to equity capital margin and related fixed assets coverage ratio are indicators that show how the company funds its fixed assets.

The fixed asset to equity capital margin and its ratio (improving from last year's figure), which correlate the value of shareholders' equity with fixed assets (as quantified in the table below), provide information on the company's ability to finance all its fixed assets with internally acquired

capital.

	30/06/2020	31/12/2019
<b>Shareholders' Equity (A)</b>	<b>21,041,093</b>	<b>20,900,905</b>
Net intangible fixed assets	13,085,979	13,091,778
Net tangible fixed assets	685,111	701,666
Equity investments and other financial fixed assets	4,155,806	4,489,459
<b>Fixed capital (B)</b>	<b>17,926,896</b>	<b>18,282,903</b>
<b>Fixed asset to equity capital margin (A- B)</b>	<b>3,114,196</b>	<b>2,618,002</b>
<b>Fixed asset to equity capital ratio (A/ B)</b>	<b>1.17</b>	<b>1.14</b>

The positive result of the fixed asset to equity capital margin, with the related ratio higher than the unit, means that the company is able to cover its entire financial needs for investments in fixed assets through equity, without having to resort to outside funding.

The fixed asset to equity capital and medium-long term debt margin and its ratio refer, instead, also to medium-long term liabilities.

	30/06/2020	31/12/2019
Shareholders' Equity (A)	21,041,093	20,900,905
Net financial position in the medium and long term (B)	21,551,568	18,588,011
Other medium and long-term liabilities (C)	1,631,230	1,563,316

Severance pay (D)	2,487,676	2,312,384
Fixed capital (E)	17,926,896	18,282,903
<b>Fixed asset to equity capital and medium-long term debt margin (A + B + C + D - E)</b>	<b>28,784,672</b>	<b>25,081,713</b>
<b>Fixed asset to equity capital and medium-long term debt ratio (A + B + C + D)/E</b>	<b>2.61</b>	<b>2.37</b>

The positive result of the fixed asset to equity capital and medium-long term debt margin (which also improves from last year's figure), with the related ratio higher than the unit, highlights the correlation between medium/long-term sources and fixed assets, i.e. company investments of a lasting nature.

#### Main financial data

The Net Financial Position as at 30/06/2020 is as follows (in Euro):

Consolidated Net Financial Position	30/06/2020	31/12/2019	Change
Bank deposits	31,612,917	21,644,993	9,967,924
Cash on hand	2,465	2,449	16
Cheques	-	-	-
Treasury Shares	-	-	-
<b>Cash and cash equivalents and treasury shares</b>	<b>31,615,382</b>	<b>21,647,442</b>	<b>9,967,940</b>
<b>Financial assets not constituting fixed assets</b>	<b>15,989</b>	<b>28,596</b>	<b>(12,608)</b>
Bonds and convertible bonds (within 12 months)	(909,100)	(909,100)	-
Payables to shareholders for loans (within 12 months)	-	-	-

Bank debt (within 12 months)	(3,951,410)	(4,831,142)	879,732
Payables to other lenders (within 12 months)	(1,387,855)	(153,077)	(1,234,778)
Advances for foreign payments	-	-	-
Short-term portion of financing	-	-	-
Financial receivables	-	-	-
<b>Short-term financial debts</b>	<b>(6,248,365)</b>	<b>(5,893,319)</b>	<b>(355,046)</b>
<b>Short-term net financial position</b>	<b>25,383,006</b>	<b>15,782,719</b>	<b>9,600,286</b>
Bonds and convertible bonds (after 12 months)	(8,636,400)	(9,090,900)	454,500
Payables to shareholders for loans (after 12 months)	-	-	-
Bank debt (after 12 months)	(11,090,587)	(8,439,239)	(2,651,348)
Payables to other lenders (after 12 months)	(1,824,581)	(1,057,872)	(766,709)
Advances for foreign payments	-	-	-
Long-term portion of financing	-	-	-
Financial receivables	-	-	-
<b>Medium/long-term net financial position</b>	<b>(21,551,568)</b>	<b>(18,588,011)</b>	<b>(2,963,557)</b>
<b>NET FINANCIAL POSITION</b>	<b>3,831,438</b>	<b>(2,805,291)</b>	<b>6,636,729</b>

The Net Financial Position was positive by Euro 3,831,438, a marked improvement compared to a negative position of Euro 2,805,291 as at 31 December 2019, mainly due to the successful

conclusion of a Euro 3,000,000 million capital increase reserved for institutional investors and to the sale of the shareholding in CY4Gate.

### Income statement and balance sheet of the Parent Company

The income statement and balance sheet data as at 30 June 2020 of the Parent Company Expert System S.p.A. are shown in the following tables:

Expert System S.p.A. Income Statement	30/06/2020	30/06/2019	Change
Revenues from sales	7,085,177	7,584,544	(499,367)
Change in inventories	0	0	0
Increase in fixed assets for internal work	2,489,751	1,858,514	631,237
Other income	760,620	509,559	251,061
<b>Value of operating production</b>	<b>10,335,548</b>	<b>9,952,617</b>	<b>382,931</b>
External operating costs	(5,808,801)	(4,515,965)	(1,292,836)
<b>Added value</b>	<b>4,526,748</b>	<b>5,436,652</b>	<b>(909,905)</b>
Personnel costs	(5,513,156)	(4,713,485)	(799,671)
<b>Gross Operating Margin</b>	<b>(986,409)</b>	<b>723,167</b>	<b>(1,709,575)</b>
Depreciation and provisions	(1,823,243)	(1,619,757)	(203,485)
<b>Operating Result</b>	<b>(2,809,651)</b>	<b>(896,591)</b>	<b>(1,913,061)</b>
Result of the financial area	4,910,907	(57,074)	4,967,981
<b>Ordinary Result</b>	<b>2,101,255</b>	<b>(953,665)</b>	<b>3,054,920</b>
Result of the extraordinary area	0	0	0
<b>Result before taxes</b>	<b>2,101,255</b>	<b>(953,665)</b>	<b>3,054,920</b>
Income taxes	15,812	(21,262)	37,074
<b>Net result</b>	<b>2,117,067</b>	<b>(974,927)</b>	<b>3,091,994</b>

Revenues from sales and services, which refer to licenses, maintenance fees and professional services, went from Euro 7,584,544 as at 30/06/2019 to the current Euro 7,085,177: this change was affected by the impact of the Covid 19 pandemic on the investments of some customers, which were put on standby, and on those professional services that could not be provided during the lockdown period due to travel and social gathering restrictions.

EBITDA went from Euro 723,167 to a negative value of Euro 986,409, mainly affected by one-off costs for the sale of the shareholding in CY4Gate (about Euro 385,000) and an increase in personnel costs, up by Euro 799,671 compared to the first half of 2019, due to the strengthening of commercial and technical areas.

EBIT was negative by Euro 2,809,651. Amortisation of intangible assets for Euro 1,763,190 refers, for Euro 1,605,514, to capitalised development costs.

Financial management showed a positive result of Euro 4,910,907 (negative by Euro 57,074 as at 30/06/2019), essentially due to the capital gain on the sale of the shareholding in CY4Gate S.p.A. (equal to Euro 5,149,911). The increase in financial charges, which rose from Euro 220,571 to Euro 290,392, is mainly due to interest expense on the bond issued in the second half of the previous year; financial income, mainly linked to intercompany loan agreements, also increased, albeit to a lesser extent, from Euro 95,987 to Euro 113,621. The exposure in sterling, largely linked to the grant of loans to subsidiaries, has a negative impact on the value of foreign currency items, which amount to a total of Euro 62,233, compared to a positive amount of Euro 67,511 as at 30/06/2019. In the light of all the above, the net result shows, net of deferred taxation of Euro 15,812, a profit of Euro 2,117,067.

Expert System S.p.A. Balance Sheet	30/06/2020	31/12/2019	Change
Net intangible fixed assets	8,727,327	7,947,601	779,726
Net tangible fixed assets	580,672	580,337	335
Equity investments and other financial fixed assets	33,718,771	33,574,842	143,930
<b>Fixed capital</b>	<b>43,026,771</b>	<b>42,102,780</b>	<b>923,991</b>

Short-term financial assets	0	0	0
Inventories	0	0	0
Receivables from customers	9,881,257	13,650,700	(3,769,443)
Other receivables	12,775,647	11,572,275	1,203,372
Accrued income and prepaid expenses	289,490	235,783	53,707
<b>Short-term operating assets</b>	<b>22,946,394</b>	<b>25,458,758</b>	<b>(2,512,365)</b>
Payables to suppliers	(3,947,862)	(3,907,968)	(39,893)
Advances	(792,594)	(311,099)	(481,495)
Tax and social security payables	(913,825)	(1,111,606)	197,781
Other debts	(2,188,809)	(1,852,173)	(336,636)
Accrued expenses and deferred income	(1,573,682)	(1,311,895)	(261,787)
<b>Short-term operating liabilities</b>	<b>(9,416,772)</b>	<b>(8,494,741)</b>	<b>(922,031)</b>
<b>Net working capital</b>	<b>13,529,622</b>	<b>16,964,017</b>	<b>(3,434,395)</b>
Severance pay	(2,487,676)	(2,312,384)	(175,292)
Tax and social security payables	0	0	0
Accrued expenses and deferred income due after 12 months	(2,235,526)	(2,362,899)	127,373
Other medium and long-term liabilities	(624,147)	(575,440)	(48,708)
<b>Medium-term liabilities</b>	<b>(5,347,350)</b>	<b>(5,250,722)</b>	<b>(96,628)</b>
<b>CAPITAL EMPLOYED</b>	<b>51,209,043</b>	<b>53,816,074</b>	<b>(2,607,032)</b>
Shareholders' Equity	(53,519,786)	(48,446,737)	(5,073,049)
Net financial position in the medium and long term	(20,324,456)	(17,919,628)	(2,404,828)
Short-term net financial position	22,635,199	12,550,290	10,084,909
<b>EQUITY AND NET FINANCIAL DEBT</b>	<b>(51,209,043)</b>	<b>(53,816,074)</b>	<b>2,607,032</b>



The change in fixed assets, which increased by Euro 923,991 in the first half of the year, is mainly due to the increase in net intangible fixed assets, which rose by Euro 779,726. The most significant change was in capitalised development costs, which increased by Euro 884,237, net of amortisation for the period of Euro 1,605,514. Equity investments and other financial fixed assets increased by Euro 143,930, mainly due to further loans granted to subsidiaries and associated companies during the first half of the year (Euro 595,780 including interest); there was also a decrease in the value of equity investments of Euro 251,266, due to the sale of the 17% stake in CY4Gate S.p.A., which took place on 19/06/2020, and a decrease of Euro 179,771 in the over-12-month portion of receivables for grants for research projects.

During the half year, exposure to banks and other lenders increased by Euro 1,979,825 mainly due to new disbursements received for Euro 2,707,980 against reimbursements paid for total Euro 728,235, while bonds were repaid for Euro 454,500. In this regard, it should be noted that the company has deemed it appropriate to adhere to the moratorium on the payment of mortgage instalments, as provided for by Art. 56 of Decree Law no. 18/2020, the so-called "Cure Italy."

Looking at current operations, a decrease of Euro 2,512,365 in short-term assets is mainly due to the negative change in trade receivables, down by Euro 3,769,443, partly offset by an increase of Euro 1,035,599 in receivables from subsidiaries and other receivables, and by an increase of Euro 465,954 in tax receivables.

With reference to current liabilities, there was an increase of Euro 922,031 mainly due to the change in advances, up Euro 481,495, and other payables, up Euro 336,236.

Therefore, the difference between current assets and liabilities shows a negative difference of Euro 3,434,395 compared to 31/12/2019, amounting to Euro 13,529,622.

Lastly, medium and long-term liabilities increased by Euro 96,628 mainly due to the increase of Euro 175,292 in the severance pay provision.

As a result, net capital employed is equal to Euro 51,209,043 (Euro 53,816,074 as at 31/12/2019), with a negative change of Euro 2,607,032.

As far as the net financial position is concerned, as at 30/06/2020 it was positive and equal to Euro 2,310,743, showing a clear inversion (Euro 7,680,081) compared to the negative figure of Euro 5,369,337 Euro as at 31/12/2019.

The table below shows the items that generated this improvement.

Expert System S.p.A. Net Financial Position	30/06/2020	31/12/2019	Change
Bank deposits	27,614,093	18,408,703	9,205,389
Cash on hand	2,216	2,200	16
Treasury Shares	0	0	0
<b>Cash and cash equivalents and treasury shares</b>	<b>27,616,309</b>	<b>18,410,903</b>	<b>9,205,406</b>
<b>Financial assets not constituting fixed assets</b>	<b>8,400</b>	<b>8,400</b>	<b>0</b>
Bonds and convertible bonds (within 12 months)	(909,100)	(909,100)	0
Payables to shareholders for loans (within 12 months)			
Bank debt (within 12 months)	(3,951,639)	(4,831,142)	879,503
Payables to other lenders (within 12 months)	(128,771)	(128,771)	0
Advances for foreign payments			
Short-term portion of financing			
Financial receivables			
<b>Short-term financial debts</b>	<b>(4,989,509)</b>	<b>(5,869,013)</b>	<b>879,503</b>
<b>Short-term net financial position</b>	<b>22,635,199</b>	<b>12,550,290</b>	<b>10,084,909</b>
Bonds and convertible bonds (after 12 months)	(8,636,400)	(9,090,900)	454,500
Payables to shareholders for loans (after 12 months)			
Bank debt (after 12 months)	(11,090,587)	(8,439,239)	(2,651,348)
Payables to other lenders (after 12 months)	(597,469)	(389,489)	(207,980)

Advances for foreign payments			
Long-term portion of financing			
Financial receivables			
<b>Medium/long-term net financial position</b>	<b>(20,324,456)</b>	<b>(17,919,628)</b>	<b>(2,404,828)</b>
<b>NET FINANCIAL POSITION</b>	<b>2,310,743</b>	<b>(5,369,337)</b>	<b>7,680,081</b>

The improvement in the net financial position benefited:

- for Euro 3,000,000, from the capital increase subscribed by Indaco Venture Partners SGR and Invesco;
- for Euro 5,401,177, from the proceeds from the sale of the shareholding in CY4Gate S.p.A.;
- for Euro 3,137,866, from the contribution deriving from operations;

net of investment expenses of Euro 2,603,304, of which Euro 2,489,751 related to development costs, and a negative contribution of other adjustments (difference between interest received and paid, increase in tax receivables, use of funds) amounting to Euro 680,830.

## **ENVIRONMENT, PERSONNEL AND RISKS**

*(Art. 40, paragraph 1-bis of Italian Legislative Decree no. 127/91)*

### **Environment**

During the half-year period, no damage was caused to the environment for which Expert System was definitively found guilty. During the half-year period, no definitive sanctions or penalties were imposed on the company for environmental offences or damages.

Expert System S.p.A. was ISO 9001:2008 certified on 30/06/2008.

The last periodic review of the ISO 9001:2015 certification, dated 27/06/2020, is valid until 28/06/2023.

### **Personnel**

During the half-year period, there were no fatal work injuries involving personnel entered in the employee ledger, no serious occupational accidents resulting in serious or very serious injuries to

personnel entered in the employee ledger and no charges for occupational illnesses involving employees or former employees and no mobbing cases.

Expert System also made investments in personnel safety in compliance with Italian Legislative Decree 81/08, training all employees in the safety of workers and supervisors, and providing refresher courses for first aid and fire-fighting personnel.

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

In accordance with Art. 2428 no. 1 of the Italian Civil Code, the main risks to which the Group is exposed are indicated below.

*Risks related to the time taken to collect trade receivables:* Expert System's business is characterised by customer payment terms which cannot be determined in advance and which can sometimes reach several months, also in relation to the type of work and the general economic situation. Any extensions of customer payment terms may require Expert System to finance its working capital needs. Therefore, these situations may affect the company's economic, equity and financial situation. This is significant also in view of the relevance of trade receivables due from European public bodies. It may take longer to collect these receivables, with such time being more difficult to predict than in case of receivables from private customers.

*Risks associated with internationalisation:* Expert System has started an internationalisation process in the hope that an appreciable part of its revenues will be generated by sales outside the domestic market, in Europe and on the American market, which is an important area to be monitored both on the public and private front. In this regard, Expert System might be exposed to risks that are typically associated with operating internationally, including those related to changes in local economic, political, fiscal and regulatory conditions, as well as risks related to the complexity of doing business in geographically remote areas, in addition to risks related to currency exchange rate fluctuations in the case of countries outside the Eurozone. Unfavourable developments in these areas might have negative effects on the Company's business and growth

prospects as well as on its economic, equity and financial position. The table below shows the exchange rates used to convert the financial statements of subsidiaries:

CURRENCY	Exchange rate as at 30/06/2020	Average exchange rate in H1 2020
USD	1.1198	1.1020
CAN	1.5324	1.5033
GBP	0.91243	0.87463
CHF	1.0651	1.0642

Risks associated with related party transactions: Expert System has concluded, and may continue to conclude commercial and financial transactions with related parties as part of its business. The main transactions with related parties carried out by the company mainly concern commercial transactions such as the purchase and sale of licenses, maintenance fees, technical and/or commercial consulting services, administrative service contracts and lease agreements. Contracts of a financial nature, on the other hand, mainly concern loans granted by Expert System S.p.A. to Group companies. In particular, last March Expert System adopted an intercompany financing plan which provides for the parent company's grant of loans to its subsidiaries for a total amount such as to allow the latter to obtain the necessary financial resources to meet their respective spending and investment commitments. The intercompany financing plan offers subsidiaries a simplified way of obtaining financial resources on the market which, on the whole, facilitates the execution of the group's business plan. All transactions have been concluded on an arm's length basis.

Risks related to claiming intellectual property rights: To protect its value, the Company has registered the Expert System and COGITO trademarks, and the core part of the COGITO software has been patented in the United States of America.

Interest rate risk: the interest rate risk management policy pursues the objective of limiting this

volatility primarily through the identification of a balanced mix of fixed-rate and floating-rate loans and also through the use of hedging derivatives that limit interest rate fluctuations, while derivatives or similar instruments are generally not used and held for mere trading purposes.

Please find below the fair value and information on the extent and nature of each category of derivative financial instruments used by the company, broken down by class, taking into account aspects such as the characteristics of the instruments themselves and the purposes of their use.

The company Expert System S.p.a. has entered into the following derivative contracts with:

The company Expert System S.p.a. has entered into the following derivative contracts with:

a) CREDIT AGRICOLE

- Type of derivative contract: Unlisted I.R.S. no. 65611/2017 signed on 25/09/2017 and expiring on 30/07/2023;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 1,000,000;
- Hedged liability: CREDIT AGRICOLE loan no. 0106917000000 of original Euro 1,000,000 signed on 25/09/2017 and expiring on 30/07/2023;
- Notional amount at the reference date (30/06/2020): Euro 600,000;
- amount of liability hedged at the reference date (30/06/2020): Euro 600,000.
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 9,828.26;
- fair value when the hedge was created: zero.

b) BANCO BPM

- "Maximum rate with instalment premium" OTC derivative contract ID 790526 F 00104961 D 00038973 signed on 24/07/2017 and expiring on 30/09/2023;
- Purpose: hedging;
- Operation with no capital exchange;

- Contractual notional amount: Euro 400,000;
- Hedged liability: BANCO BPM loan no. 03703813 of original Euro 400,000 signed on 24/07/2017 and expiring on 30/09/2023;
- Notional amount at the reference date (30/06/2020): Euro 266,667;
- amount of liability hedged at the reference date (30/06/2020): Euro 266,667;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 1,982.27;
- fair value when the hedge was created: zero.

#### c) UNICREDIT

- "IRS Payer" OTC derivative contract no. MMX24806135 signed on 02/08/2019 and expiring on 02/08/2026;
- Purpose: hedging;
- Operation with no capital exchange;
- Reference notional amount: Euro 5,000,000;
- Hedged liability: non-convertible debenture loan of original Euro 5,000,000 fully subscribed by UNICREDIT S.p.A. as per contract signed on 02/08/2019 and expiring on 02/08/2026;
- Notional amount at the reference date (30/06/2020): Euro 5,000,000;
- amount of liability hedged at the reference date (30/06/2020): Euro 5,000,000;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 66,120.95;
- Fair value when the hedge was created: zero.

#### d) UBI

- Type of derivative contract: Unlisted I.R.S. no. 171206/2018 signed on 24/10/2018 and expiring on 24/04/2022;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 1,000,000;

- Hedged liability: UBI loan no. 1276551 of original Euro 1,000,000 signed on 24/10/2018 and expiring on 24/04/2022;
- Notional amount at the reference date (30/06/2020): Euro 587,642;
- Amount of liability hedged at the reference date (30/06/2020): Euro 587,642;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 2,393.19;
- Fair value when the hedge was created: zero.

e) UBI

- Type of derivative contract: Unlisted I.R.S. signed on 28/02/2020 and expiring on 28/08/2024;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 1,500,000;
- Hedged liability: UBI loan no. 1640001 of original Euro 1,500,000 signed on 28/02/2020 and expiring on 28/08/2024;
- Notional amount at the reference date (30/06/2020): Euro 1,500,000;
- Amount of liability hedged at the reference date (30/06/2020): Euro 1,500,000;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 7,554.30;
- Fair value when the hedge was created: zero.

f) CREDIT AGRICOLE

- Type of derivative contract: Unlisted I.R.S. no. 69745/2019 signed on 22/05/2019 and expiring on 22/08/2024;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 1,000,000;
- Hedged liability: CREDIT AGRICOLE loan no. 0120308000000 of original Euro 1,000,000



signed on 22/05/2019 and expiring on 22/08/2024;

- Notional amount at the reference date (30/06/2020): Euro 803,329;
- amount of liability hedged at the reference date (30/06/2020): Euro 803,329;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 12,210.89;
- fair value when the hedge was created: zero.

g) INTESA SANPAOLO

- Type of derivative contract: Unlisted I.R.S. no. 31011814 signed on 28/06/2019 and expiring on 15/12/2023;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 500,000;
- Hedged liability: loan of original Euro 500,000 signed on 28/06/2019 and expiring on 15/12/2023;
- Notional amount at the reference date (30/06/2020): Euro 437,500;
- amount of liability hedged at the reference date (30/06/2020): Euro 437,500.
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 1,632.00;
- fair value when the hedge was created: zero.

h) BNL

- Unlisted OTC derivative contract on interest rates signed on 11/07/2019 and expiring on 11/01/2023;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 1,500,000;
- Hedged liability: loan of original Euro 1,500,000 signed on 11/07/2019 and expiring on 11/01/2023;

- Notional amount at the reference date (30/06/2020): Euro 1,250,000;
- Amount of liability hedged at the reference date (30/06/2020): Euro 1,250,000;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value positive by Euro 402.94;
- Fair value when the hedge was created: zero.

i) MPS

- “Fixed rate/Floating rate IRS with zero floor” unlisted derivative contract on interest rates signed on 12/07/2019 and expiring on 31/03/2025;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 1,150,000;
- Hedged liability: loan of original Euro 1,150,000 signed on 12/07/2019 and expiring on 31/03/2025;
- Notional amount at the reference date (30/06/2020): Euro 1,150,000;
- Amount of liability hedged at the reference date (30/06/2020): Euro 1,150,000;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 5,016.43;
- Fair value when the hedge was created: zero.

j) BPER BANK

- “Interest Rate Option Cap Premium Running” unlisted OTC derivative contract on interest rates signed on 01/07/2019 and expiring on 24/01/2024;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 3,000,000;
- Hedged liability: loan of original Euro 3,000,000 signed on 24/06/2019 and expiring on 24/01/2024;
- Notional amount at the reference date (30/06/2020): Euro 2,509,941;

- Amount of liability hedged at the reference date (30/06/2020): Euro 2,509,941;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 7,957.45;
- Fair value when the hedge was created: zero.

The Company uses derivative financial instruments to hedge its exposure to the interest rate risk, thereby stabilizing the flow of interest paid mainly on medium and long-term debt, and does not hold any speculative financial instruments.

Derivatives, recognised at fair value, are classified as hedging instruments when the relationship between the derivative and the hedged item is formally documented and the hedge is highly effective.

### **Organisational and management model in accordance with Italian Legislative Decree no. 231/2001**

Italian Legislative Decree no. 231 of 8 June 2001 has introduced into the Italian legal system the administrative liability of legal persons, companies and associations, including those without legal personality (entities). The decree establishes that no administrative liability can be ascribed to companies where they have effective and efficient organisational and management models that can prevent crimes by persons with top management positions in the Company.

Expert System S.p.A. has drawn up an Organisational and Management Model and a Code of Ethics also to reflect the company's broader business policy, which is expressed in interventions and initiatives aimed at raising awareness, both among all its personnel (from management to employees) and all external collaborators and partners, as to the company's transparent and correct management, in compliance with current legal regulations as well as the fundamental principles of business ethics in the pursuit of the corporate purpose. Within this framework, Expert System S.p.A. intends to pursue, through the adoption of the Organisational and Management

Model provided for by Italian Legislative Decree 231/2001, the objective of making its existing set of rules and controls suitable also to prevent the crimes indicated in the decree itself.

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

The adoption of the model refers exclusively to the parent company Expert System S.p.A. since the legal system considers the group as a whole only from an economic perspective. The group is not an entity and therefore cannot be considered a direct centre for the attribution of liability for a crime, and thus cannot be classified as one of the subjects indicated in Art. 1 of decree 231.

The Code of Ethics, on the other hand, is applicable to Group companies as it expresses the general principles of corporate and business ethics that the Group recognises as its own and which are to be complied with by all its employees, managers and directors. Therefore, the Code of Ethics has a different scope than the Organisational and Management Model, since the Model meets specific requirements contained in the Decree, whereas the ethical principles contained in the Code of Ethics are the basic rules of conduct for the legitimate pursuit of company activities.

The Organisational and Management Model has been developed around concrete situations that characterise the company's operations, i.e. all the company's actual activities and functions and therefore the real risks of crime that can be envisaged in relation to them.

For each function in which a potential risk has been identified as existing, one or more decisional and management protocols have been defined containing the rules to be followed in carrying out the activity. The protocols are inspired by the rule of making the various stages of the decision-making process documented and verifiable, so that the motivation that guided the decision can be traced.

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

- crimes against the P.A. and its assets;
- cyber crimes and unlawful data processing;
- organised crimes;
- forgery and crimes against industry and commerce;
- corporate crimes;
- crimes for the purpose of terrorism or subversion of the democratic order;

- crimes against individual personality;
- market abuse;
- offences committed in violation of the rules on the protection of occupational health and safety;
- money laundering and receiving of stolen goods;
- copyright infringement offences;
- the crime of making false statements to the judicial authorities;
- environmental crimes;
- employment of personnel without a legal residence permit.

The exemption from administrative liability as governed by Art. 6, paragraph 1, of Italian Legislative Decree 231/2001 requires, as an element of fundamental importance, the establishment of a Supervisory Body within the company, with autonomous powers of action and control, which has the task of supervising the operation of and compliance with the Model and verifying that the Board of Directors updates the Model itself.

The Supervisory Body of Expert System S.p.A. is made up of three members, one internal and two external members. All its members are individuals with proven skills and professionalism. The presence of the internal member ensures that the SB has immediate and in-depth knowledge of the entity's structure and the organisation of its activities in the light of its actual corporate function.

This solution is deemed the most suitable, based on the characteristics of its organisational structure, to ensure the effectiveness of the controls for which the Supervisory Body is institutionally responsible and meets the requirements of the recently approved Confindustria Guidelines.

In order to ensure the necessary stability and continuity of action for the aforementioned Body, its members hold this role for a period of 3 years from the date of their actual appointment, after which the Board of Directors ratifies a new appointment.

The appointment of the Supervisory Body, as well as its possible revocation, is the responsibility of management, which provides therefor in full compliance with the law, also on the basis of the provisions of the Confindustria Guidelines.

## **DEVELOPMENT ACTIVITIES**

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*(Art. 40, paragraph 2, letter a, of Italian Legislative Decree no. 127/91)*

Significant investments in research and development, which have always been crucial to Expert System's strategy, have been and continue to be the basis of the company's success and are fundamental to maintain its competitive advantage and remain a state-of-the-art company in the field of artificial intelligence applied to the understanding of natural language.

The costs incurred for these activities have been capitalized, also within the scope of national and international multi-year research projects in which the Company has been involved. In 2019 these activities focused on the Cogito artificial intelligence platform and the products that use the platform to target the most common customer use cases.

Most of the research and development activities in the first half of 2020 were dedicated to these three fronts:

- start of development of the NLOps platform that will replace the existing tools of the Cogito platform with an integrated end-to-end environment for the implementation of web-based categorisation and extraction language projects and with the integration of machine learning and deep learning technologies;
- extension of APIs to add new functionality and ensure integration within the new platform in a transparent and organic way;
- implementation of the new categorisation and extraction rules engine and the new inferential engine within the new version of Studio.

Other significant activities pursued during the half year were:

- issue of a minor release of Cogito intelligence Platform;
- update of the beta version of Cogito for Life Science;
- restructuring and expansion of the knowledge graph for several languages (French, Spanish, Italian and Arabic).

## **Foreseeable evolution of management**

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*(Art. 40, paragraph 2, letter c, of Italian Legislative Decree no. 127/91)*

The course of the year is inevitably influenced by the evolution of the Covid-19 health crisis. However, as shown by the trend of previous years linked to the business model of Expert System, most of our turnover should be concentrated in the last part of the year, so as to be able to seize and finalize all the potential opportunities that have been identified in these months, with the intention of recovering also the inevitable slowdown of the first half of 2020, hoping that the market will not be further negatively affected by this extraordinary and momentous event.

Despite this difficult situation, thanks to the substantial raising of new funds through capital increases that were completed in July and the sale of a shareholding that was no longer considered strategic, we will be able to strengthen and accelerate the investments underlying our 2020-2024 "Path to Lead" Strategic Plan with which we have defined the guidelines for business development.

## **TREASURY SHARES**

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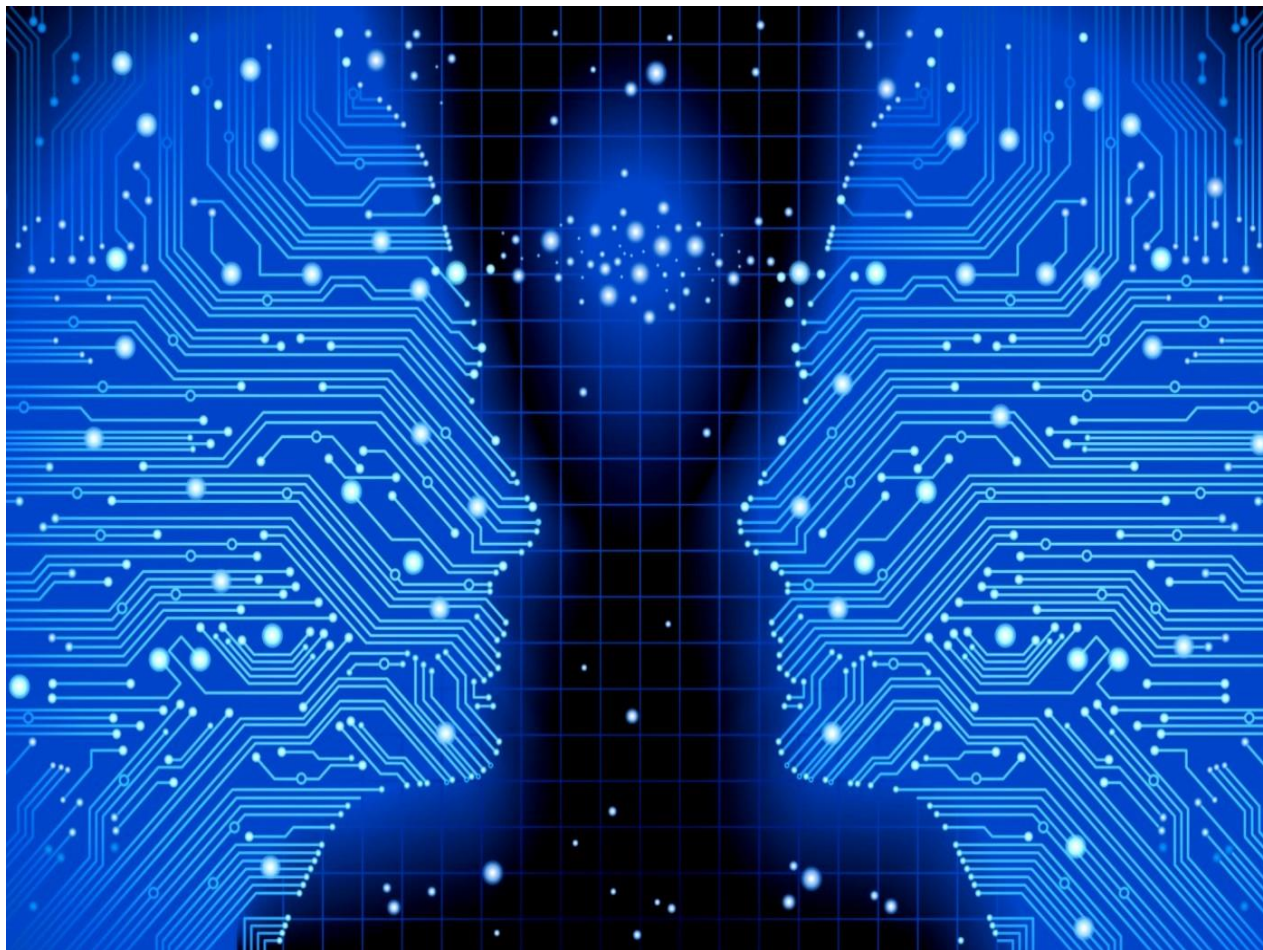
*(Art. 40, paragraph 2, letter d, of Italian Legislative Decree no. 127/91)*

As at 30 June 2020, the Parent Company Expert System S.p.A. did not hold any treasury shares.



## NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS AS AT 30/06/2020

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### **STRUCTURE AND CONTENT OF THE FINANCIAL STATEMENTS**

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The consolidated financial statements as at 30/06/2020, consisting of the balance sheet, income statement, cash flow statement and notes to the accounts, are in accordance with the provisions of Italian Legislative Decree 127/1991, supplemented, for those issues not specifically regulated by the decree, by the national accounting standards published by the Italian Accounting Body (OIC) and, where missing, by those of the International Accounting Standard Board (IASB) and the Financial Accounting Standards Board (FASB), and are accompanied by the Management Report. They are also accompanied by the following documents:



- List of companies included in the consolidated financial statements and of shareholdings:
- Companies included in the consolidation using the line-by-line method (in accordance with Art. 26)
- Other equity investments in subsidiaries and associated companies
- Reconciliation between shareholders' equity and loss for the year of the Parent Company and consolidated shareholders' equity and loss for the year.

The amounts are expressed in Euro units.

The financial statements of the companies included in the consolidation have been prepared by their management in accordance with the accounting standards mentioned above.

It should also be noted that:

- for each item in the Balance Sheet and Income Statement, the amount of the corresponding item of the consolidated financial statements as at 31/12/2019 and 30/6/2019 is indicated, respectively;
- the values of the items stated in this year's financial statements are fully comparable with those set out in the previous year's financial statements, with the exception of item A.5 "Other revenues and income, with separate indication of grants for current expenses", which was affected by a different breakdown of grants for current expenses and, consequently, also of the residual item "others". This reclassification, in order to make the financial statements data homogeneous and comparable, also affected the 2019 financial statements, which have been amended accordingly; please refer to the paragraph commenting on this item for an examination of the amounts that contributed to its formation.

### **Derogations**

There are no exceptional cases which call for application of the derogations provided for in Art. 29, paragraphs 4 and 5 of Italian Legislative Decree 127/1991.

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

With reference to the financial statements for financial years starting on or after 1/1/2016, it should be noted that Italian Legislative Decree no. 139 of 18/08/2015 (the so-called "Financial Statements Decree"), published in the Official Journal 4.9.2015 no. 205, implementing EU Directive 26/6/2013 No. 34, amended the Italian Civil Code with the aim of aligning the rules contained therein on the regulation of the financial statements of corporations, with the new EU provisions. This Directive replaces previous EU legislation with the aim of improving the scope of disclosure of accounting documents and launching a regulatory simplification process governing the preparation and publication of financial statements.

In this context of reform, the Italian Accounting Body (OIC), in accordance with the institutional purposes established by law, has also revised 20 accounting standards, which are meant to ensure the practical application of the new regulatory framework.

In particular the amendment to the financial statements of corporations concerns:

- the documents making up the financial statements;
- the principles for the preparation of financial statements;
- the contents of the Balance Sheet and Income Statement;
- valuation criteria;
- the contents of the Notes to the Accounts.

#### **Principles of consolidation of equity investments** *(Arts. 31 and 33 of Italian Legislative Decree 127/91)*

The consolidated financial statements include the financial statements of Expert System S.p.A. and of the foreign companies over which control is exercised, either directly or indirectly, as at 30/06/2020 (Art. 30 Italian Legislative Decree No. 127/91).

The assets and liabilities of consolidated companies are taken on a line-by-line basis. The book value of equity investments held by the parent company in directly and indirectly controlled subsidiaries is eliminated against the related shareholders' equity. The difference between the acquisition cost and the shareholders' equity of subsidiaries at the date of consolidation is allocated, where possible, to the assets and liabilities of subsidiaries net of deferred taxes; any remaining difference, if positive and if the requirements for the recognition of goodwill set out in

OIC 24 are met, is recognised under "Goodwill" under intangible fixed assets.

The remainder of the difference that cannot be allocated to assets and liabilities and goodwill is allocated to the income statement under item 'B14 Other operating expenses'.

Goodwill is amortised on the basis of an economic utility estimated at 5 years according to its useful life, taking into account all the information available to estimate the period in which the economic benefits will manifest themselves.

**Conversion of foreign companies' financial statements into euros** (*Art. 38, paragraph 1, letter b, of Italian Legislative Decree no. 127/91*)

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

- assets and liabilities are converted at the exchange rate in force at the end of the period;
- income and expenses are converted by applying the average exchange rate for the period;
- shareholders' equity items are converted at the rates in force during the relevant period of formation.

Exchange rate differences arising from the conversion of shareholders' equity at historical exchange rates at the time of acquisition compared to those in force at the date of the financial statements are entered directly under shareholders' equity, together with the differences between the economic result expressed at average exchange rates and the economic result expressed in Euro at the exchange rates in force at the end of the period under "Reserve for translation differences", included under "Other reserves".

Payable and receivable items and cost and revenue items among the companies included in the scope of consolidation have been eliminated. In particular, profits and losses deriving from transactions between Group companies not yet realised with third parties are eliminated, if significant.

The financial statements of the single companies approved by the Shareholders' Meeting or prepared by the Board of Directors for approval have been reclassified and adjusted, where necessary, to bring them into line with the accounting standards adopted by the Group. For companies with closing dates other than the reference date of the consolidated financial

statements, the specific interim annual financial statements have been prepared.

**Reference date of the consolidated financial statements (Art. 30 of Italian Legislative Decree 127/91)**

The reference date of the consolidated financial statements, 30/06/2020, coincides with the closing date of the interim financial statements of the companies included in the scope of consolidation.

**List of companies included in the consolidation (Art. 38, paragraph 2, letters a) to d), of Italian Legislative Decree no. 127/91)**

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

Company name	Registered office	Currency	Shareholders' Equity as at 30/06/2020	Share capital	Profit/ (Loss) 30/06/2020	Direct share of the group	Indirect share of the group
Expert System Iberia S.L.U.	Barcelona (ESP)	Euro	(2,117,424) €	€ 2,603,000	(485,307) €	100%	
Expert System France S.A.	Paris (FRA)	Euro	€ 317,569	€ 199,269	(1,399,547) €	100%	
Expert System Deutschland GmbH	Bad Homburg vdH (GER)	Euro	(1,338,549) €	€ 25,000	(298,432) €		100%
Expert System Cogito Ltd.	London (UK)	£	(1,240,603) £	£ 1,000	(204,203) £	100%	
Expert System USA Inc.	Alexandria (USA)	\$ USA	(5,962,335) \$	\$ 1	(929,058) \$	100%	

Expert System Enterprise Corp.	Rockville (USA)	\$ USA	(8,194,462) \$	\$ 200	(2,095,368) \$		100%
Expert System Canada - Semantic Technologies Inc.	Montreal (CAN)	\$ Can.	(171,473) CAD	1,000 CAD	18,464 CAD		100%
Expert System Helvetia SÀRL	Geneva (CH)	CHF	(105,989) CHF	20,000 CHF	(125,989) CHF	100%	

### List of other equity investments in subsidiaries and associated companies

It should be noted that there are no other equity investments in subsidiaries and associated companies.

### Changes in the scope of consolidation

The scope of consolidation has been enlarged compared to 31/12/2019 with the establishment of the subsidiary Expert System Helvetia SàRL.

## VALUATION CRITERIA

*(Art. 38 paragraph 1, letter a Italian Legislative Decree 127/91)*

The valuation criteria adopted for the preparation of the consolidated financial statements are in line with those used by the Parent Company, supplemented where necessary with the accounting principles adopted for particular items in the consolidated financial statements.

Items were valued on a prudential and going concern basis, taking into account the economic function of the assets and liabilities based on the principle of substance over form.

The valuation criteria adopted are unchanged compared to the previous year.

In particular, the valuation criteria adopted were as follows.

### Intangible fixed assets

Intangible fixed assets are recorded, within the limit of their recoverable value, at purchase or production cost, including ancillary charges, and systematically amortised in relation to their residual useful life, written down if the estimated recoverable value of the fixed assets is permanently lower than cost at year-end.

### **Tangible fixed assets**

Tangible fixed assets are recorded at the date on which the risks and benefits associated with the assets acquired are transferred and are recorded, within the limit of their recoverable value, at purchase or production cost net of the related depreciation provisions, including all directly attributable ancillary costs and charges.

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

The cost of fixed assets whose use is limited in time is systematically depreciated in each financial year on the basis of economic-technical rates determined in relation to the residual possibility of use.

If durable losses in value are entered, regardless of the depreciation already recorded, the fixed assets are written down in relation to their residual possibility of use. If the conditions for write-downs cease to apply in subsequent years, the original value is reinstated. Assets under construction and advances to suppliers are recorded under assets on the basis of the cost incurred and/or the advance paid, including directly attributable expenses.

### **Equity investments**

Equity investments are recorded at purchase and/or subscription cost, including ancillary charges, and written down in the event of permanent impairment of value.

### **Debt securities**

Debt securities are recognised at the time of delivery of the security and are classified under fixed assets or current assets according to their purpose.

### **Long-term debt securities**

Unlisted and unlisted long-term debt securities are valued on a security-by-security basis, assigning the cost specifically incurred to each security.

### **Non-fixed securities**

Securities that do not constitute fixed assets are recorded at the lower of purchase cost and estimated realisable value based on market trends.

### **Inventories**

Work in process on long-term contracts is valued using the percentage of completion standard: costs, revenues and contract margins are recognised on the basis of production progress. The hours worked method is used for the application of this standard.

### **Derivative financial instruments**

Derivative financial instruments are recorded at fair value corresponding to the market value, if any, or to the value resulting from valuation models and techniques that ensure a reasonable approximation to the market value. Financial instruments for which it is not possible to use such methods are valued at the purchase price.

The current value is recorded on the assets side of the balance sheet, under the specific item of financial fixed assets or current assets depending on the relevant purpose, or on the liabilities side under the specific item included in the provisions for risks and charges.

Derivatives used to hedge cash flows are offset by a shareholders' equity reserve or, for the ineffective portion, the income statement.

### **Receivables**

Receivables are classified under fixed assets or current assets on the basis of their purpose/origin

with respect to ordinary activities.

Receivables must be recognised in the financial statements using the amortised cost method, taking into account the time factor and the estimated realisable value. The company has enforced the option:

- not to discount receivables since the effective interest rate is not significantly different from the market interest rate;
- not to apply the amortised cost standard for receivables maturing within 12 months;
- not to apply the amortised cost standard since the relevant transaction costs, commissions and any other difference between initial value and the value at maturity are of little significance.

The amortised cost standard is thus not applied since the effects are irrelevant for the purpose of giving a truthful and accurate account; therefore, receivables are shown at their estimated realisable value based on the assessment of debtors' solvency and of the historical evolution of losses on receivables.

The adjustment of the nominal value of receivables to their estimated realisable value is obtained by means of allocations to the bad debt provision, recorded as a direct deduction from assets and determined in relation to the risk of loss resulting from the specific analysis of individual positions and in relation to the historical trend of losses on receivables, as well as the country risk.

Furthermore, the 'time factor' is not taken into account and no receivables due after 12 months are discounted since the difference between the effective interest rate and the market rate is not significant.

### **Cash and cash equivalents**

Cash and cash equivalents as at 30/06/2020 are valued at their nominal value.

### **Accrual and deferrals**

Accruals and deferrals are recorded on an accrual basis.

Accrued income, similar to operating receivables, are valued at their estimated realisable value.

Accrued expenses, similar to payables, are valued at their nominal value.



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

Provisions for risks and charges are established to cover losses or payables whose existence is certain or likely, but whose amount or date of occurrence could not be determined at year-end. The provisions reflect the best possible estimate on the basis of the elements available.

The pension fund is set up to cover commitments accrued at the end of the period toward those entitled to pension benefits.

The provision for taxes includes the deferred tax charges connected with consolidation adjustments, when it is likely that they will actually arise for one of the subsidiaries.

### **Employee severance pay**

It reflects the debt, subject to revaluation by means of specific indices and net of advances paid, accrued toward all Group employees as at 30/06/2020, in compliance with the law and current employment contracts.

### **Payables**

The company has enforced the option:

- a) not to discount payables since the effective interest rate is not significantly different from the market interest rate;
- b) not to apply the amortised cost standard for payables maturing within 12 months;
- c) not to apply the amortised cost standard for payables maturing after 12 months since the relevant transaction costs, commissions and any other difference between initial value and the value at maturity are of little significance.

The amortised cost standard is thus not applied since the effects are irrelevant for the purpose of giving a truthful and accurate account; therefore, payables are shown at their nominal value.

### **Criteria for the conversion of values expressed in foreign currency**

Monetary assets and liabilities outstanding at the end of the financial year, originally expressed in

the currencies of non-Euro countries, are expressed in the financial statements at the exchange rate in force at the end of the period. Gains and losses arising from the conversion of the above mentioned payables and receivables at the exchange rate in force at the financial statements date are credited and debited to the income statement, respectively.

Non-monetary assets and liabilities in foreign currency are recorded at the exchange rate in force at the time of purchase.

### **Costs and revenues**

They are presented on a prudential and accrual basis.

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

Current income taxes are recorded, for each company, on the basis of estimated taxable income in accordance with the rates and provisions in force at the end of the period in each country, taking into account applicable exemptions and any tax receivables.

Prepaid and deferred taxes are calculated on the temporary differences between the value attributed to assets and liabilities in the financial statements and the corresponding values recognised for tax purposes, based on the rates in force at the time when the temporary differences are recognised. Prepaid taxes are recognised only if their future recovery is reasonably certain.

## **CHANGES IN FIXED ASSETS**

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*(Art. 38 paragraph 1, letter b-bis, of Italian Legislative Decree 127/91)*

### **Intangible fixed assets**

Intangible fixed assets amount to Euro 13,085,979 (Euro 13,091,778 in the previous year).

The composition of and changes in individual items are represented as follows:

	Start-up and expansion costs-	Development costs	Industrial patent rights and intellectual property rights	Concessions, licenses, trademarks and similar rights	Goodwill	Other intangible fixed assets	Assets under construction	Total intangible fixed assets
<b>Value at the beginning of the year</b>								
Cost	2,332,907	40,077,162	1,662,252	31,405	14,065,831	-	-	58,169,556
Amortisation (Amortisation fund)	1,763,513	28,956,117	1,177,443	16,572	13,164,134	-	-	45,077,778
Book value as at 31/12/2019	569,394	11,121,045	484,809	14,833	901,697	-	-	13,091,778
<b>Changes during the year</b>								
Increases for acquisitions	50,000	3,113,652	-	-	-	-	-	3,163,652
Reclassifications	-	-	-	-	-	-	-	-
Decreases for disposals and divestments			(92,695)					
Amortisation for the year	157,292	2,501,207	66,950	326	450,844	-	-	3,176,619
Other changes	2,103	486	97,273	-	-	-	-	99,862

Total changes	(105,190) )	612,931	(62,371)	(326)	(450,844)	-	-	(5,799)
<b>Year-end value</b>								
Cost	2,477,95 6	43,190,813	1,569,557	31,405	14,065,83 1	-	-	61,335,56 2
Amortisation (Amortisation fund)	2,013,75 1	31,456,837	1,147,119	16,898	13,614,97 8	-	-	48,249,58 3
Book value as at 30/06/2020	464,205	11,733,976	422,438	14,507	450,853	-	-	13,085,97 9

### Goodwill

Goodwill of Euro 450,853 (net of the amortisation fund for Euro 891,844), is represented by goodwill recorded under the assets of the subsidiary Expert System France S.A..

### Breakdown of start-up and expansion costs (Art. 38 paragraph 1, letter d, of Italian Legislative Decree 127/91)

The breakdown of start-up and expansion costs is shown in the following table.

	Value at the beginning of the year	Increases during the year	Amortisation for the year	Other changes	Total changes	Year-end value
Costs of incorporation/amendments to the Bylaws	4,886		1,291		(1,291)	3,595
Start-up costs	361,409		94,545	2,103	(92,442)	268,967
Share capital increase	203,099	50,000	61,456		(11,456)	191,643

Total	569,394	50,000	157,292	2,103	(105,190)	464,205
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The costs entered are reasonably related to a useful life of several years and are systematically amortised in relation to their useful life.

### Tangible fixed assets

Tangible fixed assets amount to Euro 685,111(Euro 701,666 in the previous year).

The composition of and changes in individual items are represented as follows:

	Land and buildings	Plants and machinery	Industrial and commercial equipment	Other tangible fixed assets	Total tangible fixed assets
<b>Value at the beginning of the year</b>					
Cost	456,980	223,306	1,558	2,463,883	3,145,727
Depreciation (Depreciation fund)	116,418	217,353	1,558	2,108,732	2,444,061
Book value as at 31/12/2019	340,562	5,953	-	355,151	701,666
<b>Changes during the year</b>					
Divestments					
Increases for acquisitions		2,900		75,640	78,540

Depreciation for the year	5,543	1,126		84,590	91,259
Other changes				3,836	3,836
<b>Total changes</b>	<b>(5,543)</b>	<b>1,774</b>		<b>(12,786)</b>	<b>(16,555)</b>
<b>Year-end value</b>					
Cost	456,980	226,206	1,558	2,539,522	3,224,266
Depreciation (Depreciation fund)	121,961	218,479	1,558	2,197,157	2,539,155
<b>Book value as at 30/06/2020</b>	<b>335,019</b>	<b>7,727</b>	<b>-</b>	<b>342,365</b>	<b>685,111</b>

The item "Other tangible fixed assets", which includes residual values not classifiable under the previous items, amounts to Euro 342,365 (Euro 355,151 in the previous year) and is broken down as follows:

	Value at the beginning of the year	Changes during the year	Year-end value
Office furniture	89,238	(11,953)	77,285
Electronic office machines	226,194	6,297	232,491
Cars	-	-	-
Ordinary office machines	7,201	(2,788)	4,413
Signs	-	-	-

Mobile phones	8,455	382	8,837
Motorcycles	3,643	(607)	3,036
Local installations	20,420	(4,117)	16,303
<b>Total</b>	<b>355,151</b>	<b>(12,786)</b>	<b>342,365</b>

### Financial fixed assets - Equity investments, other securities and financial derivative assets

Equity investments not included in the scope of consolidation amount to Euro 60,777 (Euro 309,471 in the previous year).

Other securities included in financial fixed assets amount to Euro 0 (Euro 80,880 in the previous year).

The composition of and changes in individual items are represented as follows:

	Equity investments in associated companies	Equity investments in other companies	Total equity investments	Other securities
Book value as at 31/12/2019	-	309,471	309,471	80,880
Changes during the year	-	(252,266)	(252,266)	(80,880)
Increases for acquisitions	-	3,572	3,572	-
Reclassifications	-	-	-	-
Book value as at 30/06/2020	-	60,777	60,777	-

Details of the value of long-term investments in other companies are shown below:

Description	Book value
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Okkam S.r.l.	1,000
Conai	5
Confidimpresa	5,000
DATUM Consortium	3,572
Buzzoole Holdings Limited	50,000
UTE TIC x CAT	1,200
<b>Other equity investments in other companies</b>	<b>60,777</b>

### Financial fixed assets - Receivables

Receivables included in financial fixed assets amount to Euro 564,361 (Euro 577,181 in the previous year). These are receivables from Cy4gate S.r.l..

It should be noted that the agreements in place provide for these receivables to be collected in full by the end of 2020.

The composition of and changes in individual items are represented as follows:

	Initial nominal amount	Initial write-down provision	Initial net value	Allocation to write-down provision	Utilisation of the write-down provision	(Write-downs)/ Reversals of impairment losses	Other increases / (decreases)	Final nominal amount	Final write-down provision	Final net value
From subsidiaries, due within 12 months	-	-	-	-	-	-	-	-	-	-
From others, within 12 months	427,181	-	427,181	-	-	-	137,180	564,361	-	564,361



From others, due after 12 months	150,000	-	150,000	-	-	-	(150,000)	-	-	-
Total	577,181	-	577,181	-	-	-	(12,820)	564,361	-	564,361

## MOST SIGNIFICANT CHANGES IN OTHER ASSET AND LIABILITY ITEMS

*(Art. 38 paragraph 1, letter c, of Italian Legislative Decree 127/91)*

### Current assets - Inventories

Inventories included in current assets amount to Euro 8,649 (Euro 58,608 in the previous year).

The composition of and changes in individual items are represented as follows:

	Value at the beginning of the year	Change during the year	Year-end value
Raw, ancillary materials and consumables	-	-	-
Work in process on long-term contracts	58,608	(49,960)	8,649
Total inventory	58,608	(49,960)	8,649

### Current assets - Receivables

Current receivables amount to Euro 23,502,883 (Euro 29,274,341 in the previous year).

The composition of the individual items is represented as follows:

	Due within 12 months	Due after 12 months	Total nominal value	(Provisions for risks/write-downs)	Net value
From customers	14,405,583	-	14,405,583	(226,960)	14,178,623

From subsidiaries	-	-	-	-	-
From associated companies	-	-	-	-	-
Tax receivables	2,052,088	-	2,052,088	-	2,052,088
Prepaid taxes	531,895	1,505,243	2,037,138	-	2,037,138
From others	3,209,609	2,025,425	5,235,034	-	5,235,034
<b>Total</b>	<b>20,199,175</b>	<b>3,530,668</b>	<b>23,729,843</b>	<b>(226,960)</b>	<b>23,502,883</b>

The bad debt provision has been recorded as an adjustment to receivables from customers for:

- Euro 190,180 from the parent company;
- Euro 21,780 from Expert System Iberia SLU;
- Euro 15,000 from Expert System France SA.

Receivables from others amount to Euro 5,235,034 (Euro 5,786,602 in the previous year).

The composition of and changes in individual items are represented as follows:

	Initial value	Change	Final value
Security deposits	623,579	60,549	684,128
Advances	126,842	433,645	560,487
Receivables for grants for research projects	4,608,635	(1,012,787)	3,595,848
Receivables from factoring companies	30,000	(25,864)	4,136
Other receivables	397,546	(7,111)	390,435
<b>Total</b>	<b>5,786,602</b>	<b>(551,568)</b>	<b>5,235,034</b>

Below is a breakdown of receivables for grants for development projects within and after 12 months, broken down by company:

	Expert System S.p.A.	Expert System Iberia S.L.U.	Expert System France S.A.
Receivables for grants for projects within 12 months	1,034,940	72,080	519,395
Receivables for grants for projects after 12 months	1,631,386	338,047	-
<b>Total</b>	<b>2,666,326</b>	<b>410,127</b>	<b>519,395</b>

#### Composition of receivables for grants by project

Expert System S.p.A.	Receivable within 12 months	Receivable after 12 months
Horizon 2020		426,125
Horizon 2020 - EIT Digital	579,769	
PON		115,000
POR Fesr Apiae	257,285	
POR Fesr Lazio	197,886	
European Project - ISEC Call for proposals		178,478
MISE [Italian Ministry of Economic Development]		330,480
MIUR [Italian Education, University and Research Ministry]		581,303

Total	1,034,940	1,631,386
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Expert System Iberia S.L.U.	Receivable within 12 months	Receivable after 12 months
DANTE	915	-
TRIVALENT	16,227	-
LETSCROWD	54,938	-
COINFORM	-	37,383
CICCER	-	13,855
ELG	-	124,753
KDRIVE	-	92,306
XLIME	-	69,750
Total	72,080	338,047

Expert System France S.A.	Receivable within 12 months	Receivable after 12 months
E-Compliance	815	-
Faucon	185,111	-
Pythia	47,077	-
Social Truth	205,205	-
Solomon	81,187	-

Total	519,395	-
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### Current assets - Financial assets

Current financial assets amount to Euro 15,989 (Euro 28,596 in the previous year).

The composition of and changes in individual items are represented as follows:

	Value at the beginning of the year	Changes during the year	Year-end value
Equity investments not held as fixed assets in subsidiaries	-	-	-
Other equity investments not held as fixed assets	8,400	-	8,400
Other securities not held as fixed assets	20,196	(12,607)	7,589
Total	28,596	(12,607)	15,989

### Receivables - Breakdown by maturity (Art. 38 paragraph 1, letter e, of Italian Legislative Decree 127/91)

The breakdown of receivables by maturity is shown below:

	Value at the beginning of the year	Change during the year	Year-end value	Amount due within the financial year	Amount due after the financial year	Of which with a residual maturity of more than 5 years
Receivables from customers included in current assets	20,446,973	(6,268,350)	14,178,623	14,178,623	-	-

Receivables from subsidiaries included in current assets	-	-	-	-	-	-
Receivables from associated companies included in current assets	-	-	-	-	-	-
Tax receivables included in current assets	1,206,725	845,363	2,052,088	2,052,088	-	-
Deferred tax assets included in current assets	1,834,041	203,097	2,037,138	531,895	1,505,243	-
Receivables from others included in current assets	5,786,602	(551,568)	5,235,034	3,209,609	2,025,425	-
<b>Total</b>	<b>29,274,341</b>	<b>(5,771,458)</b>	<b>23,502,883</b>	<b>19,972,215</b>	<b>3,530,668</b>	<b>-</b>

### Receivables from customers - Breakdown by geographical area

Although not required by the standard, the breakdown of receivables by geographical area is provided below.

	Receivables from customers	Invoices to be issued	CN to be issued	Other trade receivables	Total
Customers Italy	5,105,327	3,887,682	-	-	8,993,009
EEC Customers	1,446,982	1,349,151	-	-	2,796,133
EXTRA-EEC Customers	2,043,610	572,831	-	-	2,616,441
<b>Totals</b>	<b>8,595,919</b>	<b>5,809,664</b>	<b>-</b>	<b>-</b>	<b>14,405,583</b>

Bad debt provision	(226,960)	-	-	-	(226,960)
Totals	8,368,959	5,809,664	-	-	14,178,623

### Current assets - Cash and cash equivalents

Cash and cash equivalents included in current assets amount to Euro 31,615,382 (Euro 21,647,442 in the previous year).

The composition of and changes in individual items are represented as follows:

	Value at the beginning of the year	Change during the year	Year-end value
Bank and postal deposits	21,644,993	9,967,924	31,612,917
Cash on hand	2,449	16	2,465
Cheques	-	-	-
Total	21,647,442	9,967,940	31,615,382

### Accrued income and prepaid expenses (Art. 38 paragraph 1, letter f, of Italian Legislative Decree 127/91)

Accrued income and prepaid expenses amount to Euro 425,867 (Euro 433,468 in the previous year).

The composition of and changes in individual items are represented as follows:

	Value at the beginning of the year	Change during the year	Year-end value
Prepaid expenses	433,468	(7,601)	425,867
Accrued income	-	-	-

Total accrued income and prepaid expenses	433,468	(7,601)	425,867
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	Discounts within 12 months	Discounts after 12 months	Discounts after 5 years
Personnel recruitment and training	620	-	-
Rental and lease liabilities	12,567	-	-
Insurance	55,455	-	-
Commissions	57,341	57,324	4,191
Consulting services	26,668	20,065	2,193
Maintenance	2,927	21	-
Rentals	21,885	-	-
Miscellaneous services	5,191	457	70
Software	33,173	1,947	-
Internet expenses	2,602	-	-
Royalties	47,762	-	-
Hardware	-	-	-
Public relations costs	45,457	-	-
Other prepaid expenses	26,021	1,715	215
<b>Totals</b>	<b>337,669</b>	<b>81,529</b>	<b>6,669</b>



## Shareholders' Equity

Shareholders' equity amounted as at 30/06/2020 to Euro 21,041,093 (Euro 20,900,905 as at 31/12/2019).

With reference to the events that occurred during the first half of the year, as already described in detail in the initial part of this report, it should be recalled that on 04/05/2020 the Board of Directors of Expert System, executing the power provided for in Art. 2443 of the Italian Civil Code, granted by the Extraordinary Shareholders' Meeting on 18/04/2019, approved a divisible share capital increase, excluding pre-emption rights, for a total maximum amount of Euro 2,999,999.70, by issuing a maximum of 1,111,111 ordinary shares with no par value, to be offered for subscription exclusively to two institutional investors:

- Indaco Venture Partners SGR (for an amount of Euro 1,999,998.00 with the issue of 740,740 shares);
- Invesco (for an amount of Euro 1,000,001.70 with the issue of 370,371 shares)

The following tables show the changes during the year in the single items making up Shareholders' Equity. The item "Other changes" includes changes in the fair value of derivatives.

	Valore di inizio esercizio	Destinazione risultato d'esercizio	Incrementi	Decrementi	Altre variazioni	Risultato d'esercizio	Valore di fine esercizio
Capitale	400.161	-	11.111	-	-		411.272
Riserva da soprapprezzo delle azioni	42.509.070	-	2.988.889	-	-		45.497.959
Riserva legale	71.718	8.314	-	-	-		80.032
Altre riserve							
Riserva straordinaria	2.008.739	2.606.027	-	-	(3.595)		4.611.171
Riserva avanzo di fusione	376.622	-	-	-	-		376.622
Riserva per utili su cambi non realizzati	398.956	-	-	-	-		398.956
Varie altre riserve	688.839	-	201.526	-	-		890.365
<b>Totale altre riserve</b>	<b>3.473.156</b>	<b>2.606.027</b>	<b>201.526</b>	<b>-</b>	<b>(3.595)</b>		<b>6.277.114</b>
Riserva per operazioni di copertura dei flussi finanziari attesi	(70.275)	-	-	(44.018)	-		(114.293)
Utili (perdite) portati a nuovo	(24.499.918)		(983.007)	-	(2.574.264)		(28.057.190)
Utile (perdita) dell'esercizio	(983.007)	983.007				(3.053.801)	(3.053.801)
Riserva negativa per azioni proprie di portafoglio	-	-	-	-	-		-
<b>Totale patrimonio netto di gruppo</b>	<b>20.900.905</b>	<b>3.597.348</b>	<b>2.218.519</b>	<b>(44.018)</b>	<b>(2.577.859)</b>	<b>(3.053.801)</b>	<b>21.041.093</b>
Patrimonio netto di terzi							
<b>Totale patrimonio netto consolidato</b>	<b>20.900.905</b>	<b>3.597.348</b>	<b>2.218.519</b>	<b>(44.018)</b>	<b>(2.577.859)</b>	<b>(3.053.801)</b>	<b>21.041.093</b>

## Share capital

The share capital is composed as follows:

Description	Initial volume, number	Initial volume, nominal value	Shares subscribed during the year, number	Shares subscribed during the year, number	Final volume, number	Final volume, nominal value
Common shares	40,016,071	-	1,111,111	-	41,127,182	-
<b>Total</b>	<b>40,016,071</b>	<b>-</b>	<b>1,111,111</b>	<b>-</b>	<b>41,127,182</b>	<b>-</b>

## Other miscellaneous reserves

"Other miscellaneous reserves" are composed as follows:

Description	Amount
PIA [Integrated Package of Allowances] Reserve Fund	141,000
Other reserves	413,758
Conversion reserve	335,607
<b>Total</b>	<b>890,365</b>

**Reserve for expected cash flow hedges** (Art. 38 paragraph 1, letter o-quater, of Italian Legislative Decree 127/91)

The information required by article 38, paragraph 1, letter o-quater of Italian Legislative Decree 127/1991 with regard to the specification of changes during the year is summarised in the table below:

	Reserve for expected cash flow hedges
Value at the beginning of the year	(70,275)
Changes during the year	(44,018)
Change in fair value	-
<b>Year-end value</b>	<b>(114,293)</b>

**Provisions for risks and charges**

The provisions for risks and charges are recorded under liabilities for a total of Euro 1,269,024 (Euro 1,205,739 in the previous year).

The composition of and changes in individual items are represented as follows:

	Provision for pensions and similar obligations	Provision for taxes, including deferred taxes	Financial derivative liabilities	Other funds	Total provisions for risks and charges
Value at the beginning of the year	4,341	1,076,568	70,275	54,555	1,205,739
Provision for the year	-	35,079	44,018	-	79,097
Use during the year	-	(15,812)	-	-	(15,812)
Other changes	-	-	-	-	-
Year-end value	4,341	1,095,835	114,293	54,555	1,269,024

These are established to cover losses or payables whose existence is certain or likely, but whose amount or date of occurrence could not be determined at year-end.

The general criteria of prudence and accrual are respected in the valuation of these provisions and no generic risk provisions without economic justification are established.

Contingent liabilities are recognised in the financial statements and included under provisions since they are considered likely and the amount of the related charge can be reasonably estimated.

### Severance pay

Employee severance pay is recorded under liabilities for a total of Euro 2,487,676 (Euro 2,312,384 in the previous year).

The composition of and changes in individual items are represented as follows:

	Employee severance pay
Value at the beginning of the year	2,312,384
Changes during the year	

Provision for the year	263,756
Use during the year	69,087
Other changes	(19,377)
<b>Total changes</b>	<b>175,292</b>
<b>Year-end value</b>	<b>2,487,676</b>

This item represents the actual debt accrued toward employees in accordance with the law and the employment contracts in force, considering all forms of remuneration of an ongoing nature. The provision corresponds to the total individual indemnities accrued in favour of employees at the financial statements date, net of advances paid, and is equal to what would have been payable to employees if the employment relationship had terminated on that date.

### Payables

Payables are recorded under liabilities for a total of Euro 37,225,448 (Euro 33,266,516 in the previous year).

The composition of the individual items is represented as follows:

	Value at the beginning of the year	Changes during the year	Year-end value
Bonds	10,000,000	(454,500)	9,545,500
Payables to shareholders for loans	-	-	-
Bank debt	13,270,381	1,771,616	15,041,997
Payables to other lenders	1,210,949	2,001,487	3,212,436
Advances	668,676	508,324	1,177,000

Payables to suppliers	4,247,286	(139,160)	4,108,126
Tax payables	1,030,945	154,445	1,185,390
Due to social security and welfare institutions	608,578	163,101	771,679
Other debts	2,229,701	(46,381)	2,183,320
<b>Total</b>	<b>33,266,516</b>	<b>3,958,932</b>	<b>37,225,448</b>

The company enforced the option not to use the amortised cost method and not to discount payables.

The accounting policies adopted by the company are as follows:

- non-discounting and non-application of the amortised cost standard for payables maturing within 12 months;
- non-discounting of payables since the effective interest rate is not significantly different from the market interest rate;
- non-application of the amortised cost standard since the relevant transaction costs, commissions and any other difference between initial value and the value at maturity are of little significance.

Therefore, payables are stated at their nominal value.

The item "Bonds" consists of the bond issued by Expert System S.p.A..

The balance of the debt for bonds, amounting to Euro 10,000,000, is due:

- for Euro 5,000,000, to the issue of a bond loan reserved for professional investors, fully subscribed by Fondo Strategico Trentino-Alto Adige managed by Finint Investments SGR S.p.A..

The main terms and conditions of the Bond are set out below:

<b>Amount</b>	Nominal Euro 5,000,000.00
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<b>Date of issue</b>	31/07/2015
<b>Maturity</b>	31/12/2024, bond repayment date
<b>Issue price</b>	Equal to 100% of the nominal value of each bond
<b>Interest rate</b>	Gross fixed rate of 4% per annum with half-yearly payment from January 2016 onwards
<b>Bond structure</b>	Amortising with 4 years of pre-amortisation

- for Euro 5,000,000, to the issue of a non-convertible bond, fully subscribed by Unicredit S.p.A..

The main terms and conditions of the Bond are set out below:

<b>Amount</b>	Nominal Euro 5,000,000.00
<b>Date of issue</b>	02/08/2019
<b>Maturity</b>	02/08/2026, bond repayment date
<b>Issue price</b>	Equal to 100% of the nominal value of each bond
<b>Interest rate</b>	Nominal floating rate equal to Euribor 3M + 225bb with quarterly payments from November 2019 onwards
<b>Bond structure</b>	Amortising with 2 years of pre-amortisation

### **Payables - Breakdown by maturity (Art. 38 paragraph 1, letter e, of Italian Legislative Decree 127/91)**

The breakdown of payables by maturity is shown below:

	Value at the beginning of the year	Change during the year	Year-end value	Amount due within the financial year	Amount due after the financial year	Of which with a maturity of more than 5 years
Bonds	10,000,000	(454,500)	9,545,500	909,100	8,636,400	1,250,000
Payables to shareholders for loans	-	-	-	-	-	-
Bank debt	13,270,381	1,771,616	15,041,997	3,951,410	11,090,587	107,089
Payables to other lenders	1,210,949	2,001,487	3,212,436	1,387,855	1,824,581	104,323
Advances	668,676	508,324	1,177,000	814,794	362,206	-
Payables to suppliers	4,247,286	(139,160)	4,108,126	4,108,126	-	-
Tax payables	1,030,945	154,445	1,185,390	1,185,390	-	-
Due to social security and welfare institutions	608,578	163,101	771,679	771,679	-	-
Other debts	2,229,701	(46,381)	2,183,320	2,183,320	-	-
<b>Total payables</b>	<b>33,266,516</b>	<b>3,958,932</b>	<b>37,225,448</b>	<b>15,311,674</b>	<b>21,913,774</b>	<b>1,461,412</b>

**Payables secured by collateral on company assets (Art. 38 paragraph 1, letter e, of Italian Legislative Decree 127/91)**

Information about collateral on the company's assets is shown below:

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	Mortgage-backed payables	Payables not secured by collateral	Total
Bonds	-	9,545,500	9,545,500
Bank debt	227,862	14,814,135	15,041,997
Payables to other lenders	-	3,212,436	3,212,436
Advances	-	1,177,000	1,177,000
Payables to suppliers	-	4,108,126	4,108,126
Tax payables	-	1,185,390	1,185,390
Due to social security and welfare institutions	-	771,679	771,679
Other debts	-	2,183,320	2,183,320
<b>Total payables</b>	<b>227,862</b>	<b>36,997,586</b>	<b>37,225,448</b>

**Accrued expenses and deferred income** (Art. 38 paragraph 1, letter f, of Italian Legislative Decree 127/91)

Accrued expenses and deferred income are recorded under liabilities for a total of Euro 7,941,757 (Euro 8,517,887 in the previous year).

The composition of and changes in individual items are represented as follows:

	Value at the beginning of the year	Change during the year	Year-end value
Accrued expenses	151,530	3,833	155,363
Deferred income	8,366,357	(579,963)	7,786,394

Total accrued expenses and deferred income	8,517,887	(576,130)	7,941,757
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#### Composition of deferred income:

	Within 12 months	After 12 months	After 5 years
Hosting fees	158,757	27	-
Grants for research projects	1,072,549	2,906,444	-
Tax receivable	574,926	766,412	-
Licences	105,557	-	-
Maintenance	1,796,517	33,180	-
Provision of services	342,127	29,898	-
Other deferred income	-	-	-
<b>Totals</b>	<b>4,050,433</b>	<b>3,735,961</b>	<b>-</b>

Accrued expenses and deferred income are determined on an accrual basis.

For long-term accruals and deferrals, the conditions that led to their original recognition were verified when preparing these statements, adopting, where necessary, the appropriate changes.

They represent the connection items of the financial year counted on an accrual basis.

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

As at 30/06/2020, there were no accruals and deferrals with a duration of more than five years.

## Amount of financial charges allocated during the year to the assets in the balance sheet, separately for each item

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*(Art. 38, paragraph 1, letter g, of Italian Legislative Decree 127/91)*

It should be noted that during the year no financial charges were recorded as assets in the balance sheet.

## INFORMATION ON INCOME STATEMENT

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### Revenue recognition

Revenues from the sale of products are recognised at the time when the corresponding risks and benefits are transferred, which is normally identified with the delivery or shipment of the goods.

Revenues of a financial nature and those deriving from the provision of services are recognised on an accrual basis.

Revenues and income, costs and charges relating to foreign currency transactions are determined at the exchange rate on the date when the transaction is carried out.

Income and expenses relating to repurchase agreements, including the difference between forward price and spot price, are stated for the portion pertaining to the year.

### Value of production

Description	Previous period	Current period	Change
Revenues from sales and services	11,872,691	9,573,487	(2,299,204)
Change in work in process on long-term contracts	(93,190)	(49,960)	43,230
Increases in fixed assets for internal work	2,762,333	3,110,558	348,225
Other revenues and income	814,099	1,098,782	284,683

Totals	15,355,933	13,732,867	(1,623,066)
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### Revenues from sales and services - breakdown by geographical area

*(Art. 38, paragraph 1, letter i, of Italian Legislative Decree no. 127/91)*

The figures in the income statement as at 30/06/2020, shown above, are compared with those of the previous year.

The breakdown of revenues by geographical area is shown below:

Geographical area	Current year value
Revenues Italy	4,961,900
EEC Revenues	1,875,188
EXTRA-EEC Revenues	2,736,399
Total	9,573,487

### Other revenues and income

Other revenues and income are recorded under value of production of the income statement for a total of Euro 1,098,782 (Euro 814,099 in the previous year).

Individual items are made up as follows:

	Previous period	Current period	Change
Revenues for tax credit	273,056	414,348	141,292
Capital contributions	412,917	621,732	208,815
Grants for current expenses	-	-	-
Miscellaneous refunds	78,051	3,416	(74,635)

Other revenues	36,963	56,801	19,838
Contingent assets	13,111	2,485	(10,626)
<b>Totals</b>	<b>814,099</b>	<b>1,098,782</b>	<b>284,683</b>

### Expenses for services

Expenses for services are recorded under costs of production of the income statement for a total of Euro 5,726,081 (Euro 4,766,742 in the previous year).

Individual items are made up as follows:

	Previous year's value	Current year value	Change
Utilities	113,473	92,146	(21,327)
Maintenance and repair costs	120,757	113,546	(7,211)
Consulting services	2,548,344	3,836,548	1,288,204
Directors' fees	468,109	542,255	74,146
Fees to auditors and external auditors	22,515	34,800	12,285
Commissions payable	22,107	-	(22,107)
Advertising	171,597	194,073	22,476
Services for personnel	282,195	402,298	120,103
Fairs and corporate events	91,581	11,240	(80,341)
Condominium expenses	79,826	67,264	(12,562)
Services from financial enterprises and banks of a non-financial nature	25,991	24,139	(1,852)

Insurance	90,495	80,033	(10,462)
Entertainment expenses	39,068	21,394	(17,674)
Travel and business trip expenses	514,049	174,054	(339,995)
Rental costs	58,184	68,153	9,969
Other	118,450	64,138	(54,312)
<b>Total</b>	<b>4,766,742</b>	<b>5,726,081</b>	<b>959,339</b>

### Use of third-party assets

Expenses for the use of third-party assets are recorded under costs of production of the income statement for a total of Euro 1,025,457 (Euro 889,498 in the previous year).

Individual items are made up as follows:

	Previous period	Current period	Change
Rental and lease liabilities	428,380	407,799	(20,581)
Cloud rental	264,086	452,438	188,352
Truck rental	-	-	-
Vehicle rental	96,350	117,567	21,217
Hardware rental	1,043	410	(633)
Royalties	99,640	47,243	(52,397)
<b>Totals</b>	<b>889,498</b>	<b>1,025,457</b>	<b>135,959</b>

### Personnel costs

This item includes all expenses for employees, including merit salary increases, changes in category, cost-of-living adjustments, the cost of holidays not taken and provisions set aside by law and collective agreements.

### Other operating expenses

Other operating expenses are recorded under costs of production of the income statement for a total of Euro 125,242 (Euro 100,481 in the previous year).

Individual items are made up as follows:

	Previous period	Current period	Change
Taxes and fees	39,445	19,911	(19,534)
Losses on receivables	-	38,591	38,591
Magazine and newspaper subscriptions	30,983	9,574	(21,409)
Other operating expenses	30,052	57,166	27,114
<b>Total</b>	<b>100,481</b>	<b>125,242</b>	<b>24,761</b>

### Interest and other financial charges *(Art. 38, paragraph 1, letter l, of Italian Legislative Decree no. 127/91)*

The breakdown of the item "Interest and other financial charges" is shown below:

	Previous period	Current period	Change
Interest on debt for bonds	100,000	139,917	39,917
Interest on loans	82,909	83,776	867
Interest on factoring	8,761	-	(8,761)

Commissions for sureties	12,798	10,104	(2,694)
Overdraft charges	11,066	12,494	1,428
Commissions on financing	6,516	24,156	17,640
Other financial charges	9,381	20,321	10,940
<b>Totals</b>	<b>231,432</b>	<b>290,768</b>	<b>59,336</b>

### Income taxes

The composition of the individual items is represented as follows:

	Current taxes	Taxes relating to previous years	Deferred taxes	Prepaid taxes	Income (expenses) from participation in the tax consolidation/tax transparency scheme	Total
IRES	-	-	(15,812)	-	-	(15,812)
IRAP	-	-	-	-	-	-
income taxes (subsidiaries)	1,323	-	35,079	(203,095)	-	(166,693)
<b>Total</b>	<b>1,323</b>	<b>-</b>	<b>19,267</b>	<b>(203,095)</b>	<b>-</b>	<b>(182,505)</b>

### REVENUES OR COSTS OF AN EXCEPTIONAL AMOUNT OR INCIDENCE

*(Art. 38, paragraph 1, letter m, of Italian Legislative Decree no. 127/91)*

It should be noted that in 2020 no individual revenue or cost items of an exceptional amount or incidence were recorded, with the exception of the capital gain (Euro 5,149,911) relating to the sale by the parent company Expert System S.p.A. of the entire minority shareholding in CY4Gate S.p.A. (the shareholding was entered under financial fixed assets).



## OTHER INFORMATION

### Reconciliation between shareholders' equity and profit for the year of the parent company and consolidated shareholders' equity and profit for the year

	Shareholders' Equity	of which: result for the year
Balances as per parent company's financial statements	53,519,786	2,117,067
Adjusted balances as per parent company's financial statements	53,519,786	2,117,067
Effect of the valuation of equity investments using the line-by-line method		
- Elimination of the book values of subsidiaries	(16,862,349)	-
- Shareholders' Equity of subsidiaries	(10,279,878)	
- Result for the year of subsidiaries	(5,220,896)	(5,220,896)
- Amortisation of consolidation differences	-	-
Adjustments to the sale of fixed assets	(108,147)	25,981
Other adjustments	(7,422)	24,046
Total adjustments	(32,478,693)	(5,170,868)
Group equity and result for the year	21,041,093	(3,053,801)
Consolidated equity and result for the year	21,041,093	(3,053,801)

### Personnel composition

Please find below information concerning the personnel of the companies included in the

consolidation, pursuant to Art. 38, paragraph 1, letter n) of Italian Legislative Decree 127/1991:

	Current average number	Previous year's average number
Executives	-	-
Middle managers	68	36
Employees	177	196
Total	245	232

#### Remuneration of directors and statutory auditors of the parent company

Below is the information regarding the remuneration of the directors and statutory auditors of the parent company for the performance of these functions also in other companies included in the consolidation, in accordance with Art. 38, paragraph 1, letter o) of Italian Legislative Decree 127/1991:

	Directors	Statutory auditors
Remuneration	498,054	5,140

#### Derivative financial instruments (Art. 38, paragraph 1, letter o-ter, of Italian Legislative Decree no. 127/91)

For the following categories of derivative financial instruments, information is provided regarding their fair value, their extent and nature, changes in value recognized directly in the income statement, as well as those recognized in shareholders' equity reserves:

Please find below the fair value and information (referred to the half year in question) on the extent and nature of each category of derivative financial instruments used by the parent company, broken down by class, taking into account aspects such as the characteristics of the instruments themselves and the purposes of their use.

The parent company Expert System S.p.A has entered into the following derivative contracts with:

k) CREDIT AGRICOLE

- Type of derivative contract: Unlisted I.R.S. no. 65611/2017 signed on 25/09/2017 and expiring on 30/07/2023;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 1,000,000;
- Hedged liability: CREDIT AGRICOLE loan no. 0106917000000 of original Euro 1,000,000 signed on 25/09/2017 and expiring on 30/07/2023;
- Notional amount at the reference date (30/06/2020): Euro 600,000;
- amount of liability hedged at the reference date (30/06/2020): Euro 600,000.
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 9,828.26;
- fair value when the hedge was created: zero.

l) BANCO BPM

- "Maximum rate with instalment premium" OTC derivative contract ID 790526 F 00104961 D 00038973 signed on 24/07/2017 and expiring on 30/09/2023;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 400,000;
- Hedged liability: BANCO BPM loan no. 03703813 of original Euro 400,000 signed on 24/07/2017 and expiring on 30/09/2023;
- Notional amount at the reference date (30/06/2020): Euro 266,667;
- amount of liability hedged at the reference date (30/06/2020): Euro 266,667;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 1,982.27;

- fair value when the hedge was created: zero.

m) UNICREDIT

- "IRS Payer" OTC derivative contract no. MMX24806135 signed on 02/08/2019 and expiring on 02/08/2026;
- Purpose: hedging;
- Operation with no capital exchange;
- Reference notional amount: Euro 5,000,000;
- Hedged liability: non-convertible debenture loan of original Euro 5,000,000 fully subscribed by UNICREDIT S.p.A. as per contract signed on 02/08/2019 and expiring on 02/08/2026;
- Notional amount at the reference date (30/06/2020): Euro 5,000,000;
- amount of liability hedged at the reference date (30/06/2020): Euro 5,000,000;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 66,120.95;
- Fair value when the hedge was created: zero.

n) UBI

- Type of derivative contract: Unlisted I.R.S. no. 171206/2018 signed on 24/10/2018 and expiring on 24/04/2022;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 1,000,000;
- Hedged liability: UBI loan no. 1276551 of original Euro 1,000,000 signed on 24/10/2018 and expiring on 24/04/2022;
- Notional amount at the reference date (30/06/2020): Euro 587,642;
- Amount of liability hedged at the reference date (30/06/2020): Euro 587,642;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 2,393.19;
- Fair value when the hedge was created: zero.

o) UBI

- Type of derivative contract: Unlisted I.R.S. signed on 28/02/2020 and expiring on 28/08/2024;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 1,500,000;
- Hedged liability: UBI loan no. 1640001 of original Euro 1,500,000 signed on 28/02/2020 and expiring on 28/08/2024;
- Notional amount at the reference date (30/06/2020): Euro 1,500,000;
- Amount of liability hedged at the reference date (30/06/2020): Euro 1,500,000;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 7,554.30;
- Fair value when the hedge was created: zero.

p) CREDIT AGRICOLE

- Type of derivative contract: Unlisted I.R.S. no. 69745/2019 signed on 22/05/2019 and expiring on 22/08/2024;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 1,000,000;
- Hedged liability: CREDIT AGRICOLE loan no. 0120308000000 of original Euro 1,000,000 signed on 22/05/2019 and expiring on 22/08/2024;
- Notional amount at the reference date (30/06/2020): Euro 803,329;
- amount of liability hedged at the reference date (30/06/2020): Euro 803,329;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 12,210.89;
- fair value when the hedge was created: zero.

q) INTESA SANPAOLO

- Type of derivative contract: Unlisted I.R.S. no. 31011814 signed on 28/06/2019 and expiring on 15/12/2023;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 500,000;
- Hedged liability: loan of original Euro 500,000 signed on 28/06/2019 and expiring on 15/12/2023;
- Notional amount at the reference date (30/06/2020): Euro 437,500;
- amount of liability hedged at the reference date (30/06/2020): Euro 437,500.
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 1,632.00;
- fair value when the hedge was created: zero.

r) BNL

- Unlisted OTC derivative contract on interest rates signed on 11/07/2019 and expiring on 11/01/2023;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 1,500,000;
- Hedged liability: loan of original Euro 1,500,000 signed on 11/07/2019 and expiring on 11/01/2023;
- Notional amount at the reference date (30/06/2020): Euro 1,250,000;
- Amount of liability hedged at the reference date (30/06/2020): Euro 1,250,000;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value positive by Euro 402.94;
- Fair value when the hedge was created: zero.

s) MPS

- “Fixed rate/Floating rate IRS with zero floor” unlisted derivative contract on interest rates signed on 12/07/2019 and expiring on 31/03/2025;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 1,150,000;
- Hedged liability: loan of original Euro 1,150,000 signed on 12/07/2019 and expiring on 31/03/2025;
- Notional amount at the reference date (30/06/2020): Euro 1,150,000;
- Amount of liability hedged at the reference date (30/06/2020): Euro 1,150,000;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 5,016.43;
- Fair value when the hedge was created: zero.

t) BPER BANK

- “Interest Rate Option Cap Premium Running” unlisted OTC derivative contract on interest rates signed on 01/07/2019 and expiring on 24/01/2024;
- Purpose: hedging;
- Operation with no capital exchange;
- Contractual notional amount: Euro 3,000,000;
- Hedged liability: loan of original Euro 3,000,000 signed on 24/06/2019 and expiring on 24/01/2024;
- Notional amount at the reference date (30/06/2020): Euro 2,509,941;
- Amount of liability hedged at the reference date (30/06/2020): Euro 2,509,941;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 7,957.45;
- Fair value when the hedge was created: zero.

**Financial fixed assets stated at a value higher than their fair value**

*(Art. 38, paragraph 1, letter o-quater, of Italian Legislative Decree no. 127/91)*

No data to report.

## Commitments, guarantees and potential liabilities not shown on the balance sheet

(Art. 38, paragraph 1, letter h, of Italian Legislative Decree no. 127/91)

The table below shows commitments, guarantees and potential liabilities not shown on the balance sheet:

	Initial balance	Change	Final balance
<b>SURETIES</b>	1,214,618	115,411	1,330,029
- to other companies	1,214,618	115,411	1,330,029

These are surety guarantees to credit institutions.

## Related party transactions (Art. 38, paragraph 1, letter o-quinquies, of Italian Legislative Decree no. 127/91)

Below is information concerning related party transactions.

### Trade and financial relations

Company	Financial payables	Financial receivables	Trade receivables	Trade payables	Sales	Purchases
EXPERT SYSTEM HELVETIA SÀRL	-	188,307	522	31,757	1,053	31,757
EXPERT SYSTEM USA INC	-	5,669,054	1,086,593	1,017	170,929	20
EXPERT SYSTEM COGITO LTD	-	692,701	950,303	102,587	376,506	105,150
EXPERT SYSTEM IBERIA S.L.U.	-	3,027,915	1,665,276	74,622	145,827	47,108
EXPERT SYSTEM FRANCE SA	-	1,434,973	1,657,435	176,112	434,474	70,535



EXPERT SYSTEM ENTERPRISE CORP	-	2,434,204	4,123,446	87,793	414,852	57,631
EXPERT SYSTEM DEUTSCHLAND GMBH	-	1,102,100	318,807	-	120,737	-
EXPERT SYSTEM CANADA Semantic Technologies Inc	-	-	23,847	-	7,713	-
<b>Total</b>	<b>-</b>	<b>14,549,254</b>	<b>9,826,229</b>	<b>473,888</b>	<b>1,672,091</b>	<b>312,201</b>

### Trade relations

Company	Payables	Receivables	Guarantees	Commitments	Costs	Revenues
EXPERT SYSTEM HELVETIA SÀRL	31,757	522	-	-	31,757	522
EXPERT SYSTEM USA INC	1,017	1,086,593	-	-	20	129,534
EXPERT SYSTEM COGITO LTD	102,587	950,303	-	-	105,150	371,442
EXPERT SYSTEM IBERIA S.L.U.	74,622	1,665,276	-	-	47,108	124,888
EXPERT SYSTEM FRANCE SA	176,112	1,657,435	-	-	70,535	424,194
EXPERT SYSTEM ENTERPRISE CORP	87,793	4,123,446	-	-	57,631	397,023
EXPERT SYSTEM DEUTSCHLAND GMBH	-	318,807	-	-	-	112,634
EXPERT SYSTEM CANADA Semantic Technologies Inc	-	23,847	-	-	-	7,713

<b>Total</b>	<b>473,888</b>	<b>9,826,229</b>	<b>-</b>	<b>-</b>	<b>312,201</b>	<b>1,567,950</b>
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## Financial relations

Company	Payables	Receivables	Guarantees	Commitments	Charges	Income
EXPERT SYSTEM HELVETIA SÀRL	-	188,307	-	-	-	531
EXPERT SYSTEM USA INC	-	5,669,054	-	-	-	41,395
EXPERT SYSTEM COGITO LTD	-	692,701	-	-	-	5,064
EXPERT SYSTEM IBERIA S.L.U.	-	3,027,915	-	-	-	20,939
EXPERT SYSTEM FRANCE SA	-	1,434,973	-	-	-	10,280
EXPERT SYSTEM ENTERPRISE CORP	-	2,434,204	-	-	-	17,829
EXPERT SYSTEM DEUTSCHLAND GMBH	-	1,102,100	-	-	-	8,103
EXPERT SYSTEM CANADA Semantic Technologies Inc	-	-	-	-	-	-
<b>Total</b>	<b>-</b>	<b>14,549,254</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>104,141</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 Expert System HELVETIA SÀRL.:**

- Granting of a Euro 187,776 loan to the subsidiary with interest in the first half of 2020 for Euro 531.

**Sale**

- Provision of professional services for Euro 12;
- Reimbursement of miscellaneous expenses for Euro 510.

**Purchase**

- Costs for miscellaneous reimbursements for Euro 31,757.

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

- Granting of a Euro 5,390,679 loan to the subsidiary with interest in the first half of 2020 for Euro 41,395

**Sale**

- Maintenance fees for Euro 61,283;
- Provision of professional services for Euro 10,143;
- Reimbursement of miscellaneous expenses for Euro 1,178;
- Concession of licences for Euro 56,930.

**Purchase**

- Provision of professional services by the subsidiary for Euro 20.

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

- Granting of a Euro 659,427 loan to the subsidiary with interest in the first half of 2020 for Euro 5,064.

**Sale**

- Provision of professional services for Euro 227,400;
- Concession of licences for Euro 97,430;

- Maintenance fees for Euro 9,063;
- Reimbursement of miscellaneous expenses for Euro 37,549.

#### Purchase

- Costs for miscellaneous reimbursements for Euro 105,150.

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

- Granting of a Euro 2,766,000 loan to the subsidiary with interest in the first half of 2020 for Euro 20,939

#### Sale

- Provision of professional services for Euro 49,805;
- Concession of licences for Euro 13,500;
- Reimbursement of miscellaneous expenses for Euro 21,909;
- Maintenance fees for Euro 39,674.

#### Purchase

- Provision of professional services by the subsidiary for Euro 47,108.

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

- Granting of a Euro 1,338,774 loan to the subsidiary with interest in the first half of 2020 for Euro 10,280

#### Sale

- Provision of professional services for Euro 104,984;
- Concession of licences for Euro 170,400;
- Maintenance fees for Euro 67,344;
- Reimbursement of miscellaneous expenses for Euro 81,466.

#### Purchase

- Professional services provided by the subsidiary for Euro 27,358;
- Costs for miscellaneous reimbursements for Euro 43,177.

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

- Granting of a Euro 2,321,843 loan to the subsidiary with interest in the first half of 2020 for Euro 17,829

**Sale**

- Concession of licences for Euro 45,121;
- Provision of professional services for Euro 129,299;
- Maintenance fees for Euro 163,479;
- Reimbursement of miscellaneous expenses for Euro 59,124.

**Purchase**

- Provision of professional services by the subsidiary for Euro 164;
- Costs for miscellaneous reimbursements for Euro 57,467.

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

- Granting of a Euro 1,080,000 loan to the subsidiary with interest in the first half of 2020 for Euro 8,103.

**Sale**

- Provision of professional services for Euro 44,693;
- Concession of licences for Euro 50,250;
- Maintenance fees for Euro 6,562;
- Reimbursement of miscellaneous expenses for Euro 11,129.

**With the subsidiary Expert System Canada - Semantic Technologies Inc.:****Sale**

- Maintenance fees for Euro 6,852;
- Provision of professional services for Euro 296;
- Reimbursement of miscellaneous expenses for Euro 565.

**Agreements not shown on the balance sheet (Art. 38, paragraph 1, letter o-sexies, of Italian Legislative Decree no. 127/91)**

There is no information concerning the nature and economic purpose of agreements not shown on the balance sheet.

**Indication of fees pursuant to Art. 38, paragraph 1, letter o-septies of Italian Legislative Decree 127/1991**

Below are details of the fees paid to the audit firm BDO Italia S.p.a., for the audit of the consolidated accounts, other audit services, tax advisory services and services other than the statutory audit provided to the Group:

	Costs for tax advisory services and other audit services	Costs for audit services
Expert System S.p.A.	22,298	13,400
Expert System France S.A.	-	22,628
Expert System Iberia S.L.U.	19,502	-
Expert System Deutschland GMBH	6,239	-
Expert System Cogito Ltd.	-	-
Expert System Enterprise Corp.	-	-
Expert System USA Inc.	4,537	-
Expert System Canada - Semantic Technologies Inc.	-	-
Expert System Helvetia SàRL	4,139	6,578

**Significant events occurred after 30/06/2020**

*(Art. 38, paragraph 1, letter O-decies of Italian Legislative Decree no. 127/91)*

The Board of Directors of Expert System S.p.A., on 08/07/2020, with the deed drawn up by Notary Rolando Rosa, index no. 125042, collection no. 23397, decided to partially exercise the power granted to it, resolving a capital increase for a total maximum amount of Euro 7,931,668.50, by issuing a maximum of 2,937,655 new ordinary shares to be allocated to shareholders.

The shareholders were given the option to subscribe 1 newly issued share every 14 shares held at a price of Euro 2.70 per share, of which Euro 0.01 to be allocated to the share capital increase and Euro 2.69 to the share premium reserve.

The capital increase approved by the Board of Directors on 08/07/2020 was fully subscribed, with the last subscription on 28/07/2020, for a total value of Euro 7,931,668.50 including share premium; as a result of the above, the share capital approved by Expert System S.p.A. rose to Euro 440,648.37 divided into 44,064,837 ordinary shares with no par value.

Subsequently, on 29/07/2020, with the deed drawn up by Notary Rolando Rosa, index no. 125104, collection no. 23440, the Board of Directors resolved to further execute the power granted by the Extraordinary Shareholders' Meeting on 29/06/2020, increasing the share capital, for payment and in a divisible manner, by a maximum amount of Euro 17,068,330.80, deciding to offer 6,321,604 newly issued shares as part of a private placement to be carried out through an accelerated bookbuilding procedure and to implement said issue with the exclusion of pre-emption rights pursuant to Art. 2441, paragraph 5, of the Italian Civil Code, being reserved exclusively for "qualified investors" in Italy and "institutional investors" abroad. Also in this case, the newly issued shares were offered at a subscription price of Euro 2.70 per share, of which Euro 0.01 to be allocated to the share capital increase and Euro 2.69 to the share premium reserve.

On 30/07/2020, following the full subscription of the capital increase approved the previous day, for a total value of Euro 17,068,330.80 including share premium, the share capital approved by Expert System S.p.A. rose to Euro 503,864.41 divided into 50,386,441 ordinary shares with no par value.

Therefore, the Board of Directors essentially fully executed the power granted to it by the Extraordinary Shareholders' Meeting on 29/06/2020, waiving the portion not exercised for a total of Euro 0.70.

Finally, it should be noted that on 15/07/2020 the second share capital increase, delegated to the Board of Directors, was carried out, implementing the incentive plan called "2018 - 2020 Stock Grant Plan". The incentive plan provides for the free assignment to the employees of Expert System S.p.A. and its subsidiaries (on a personal basis and without the possibility of transfer) of a maximum of 800,000 rights to receive, free of charge (at a 1:1 ratio), ordinary shares of the Issuer, subject to the achievement of certain performance and/or personal targets in each of the three financial years ending on 31 December 2018, 2019 and 2020, respectively. On 15/07/2020, the first share capital increase was carried out, implementing the "2018 - 2020 Stock Grant Plan" which involved the issue of the first tranche of 173,500 new shares pursuant to a free capital increase of Euro 1,735.00, using the extraordinary reserve of the same amount.

On 27 July 2020 Expert System presented expert.ai NL API. The application is available via cloud at the dedicated website <https://developer.expert.ai> and marks the first step in Expert System's cloud strategy to enable data scientists, computational linguists, knowledge engineers and developers to easily design, develop, manage and integrate new applications based on natural language understanding (Natural Language - NL) into their solutions.

The release of the API, in line with phase 1 of the Path to Lead Strategic Plan, is the first step to become the reference artificial intelligence platform to solve problems related to natural language. expert.ai NL API offers cutting-edge functionality, based on the uniqueness of Expert System's symbolic approach, which differs for its ability to simultaneously exploit artificial intelligence algorithms, machine learning and knowledge graphs to ensure maximum accuracy in language processing and disambiguation to understand any type of text, out-of-the-box. Therefore, Expert System's API supports developers and data scientists in optimising the implementation of intelligent applications to automate knowledge-based business processes, drawing strategic new information from the language to support decision-making and improve business results.

expert.ai NL API, available as a free trial on the dedicated website <https://developer.expert.ai>, allows for the analysis of any type of document with excellent results in terms of quality, depth and accuracy. By reducing overall development time and costs, it enables developers and data scientists to bring to the market faster and more effective language understanding applications for



text analytics, research and insight, content enrichment, chatbots and virtual assistants, sentiment analysis, automatic contract analysis, email management, etc.

On 5 August 2020 Expert System announced the appointment of Colin Matthews as Chief Revenue Officer (CRO) and Keith C. Lincoln as Chief Marketing Officer (CMO). The addition of these new key management figures is a further concrete initiative in the implementation of the Path to Lead Strategic Plan. As CRO, Colin Matthews will lead Expert System's global sales organisation. As CMO, Keith C. Lincoln will be responsible for the global marketing organisation and for communicating the value of Expert System products and solutions to all customers, from data scientists and developers to technology partners and solution providers, and through all channels. Relying on their deep industry knowledge and experience, Colin Matthews and Keith Lincoln will allow us to take full advantage of the strengths of the Expert System technology and team to fully exploit this potential and continue on our path of innovation and international growth, starting in the United States.

Expert System was awarded as "Best Overall Natural Language Processing (NLP) Company" at the Artificial Intelligence (AI) Breakthrough Awards 2020.

The objective of the AI Breakthrough Awards programme, organised by the prestigious consulting and marketing organisation AI Breakthrough, is to recognise excellence and innovation and efficiency capacity in the world of artificial intelligence and machine learning: from AI platforms to Deep Learning algorithms, from intelligent process automation to Business Intelligence, from natural language processing (NLP) to industry solutions, etc.. For this year's edition, more than 2,750 applications were collected from over 15 countries.

Fincons Group and Expert System sign a partnership to enhance digital transformation. Fincons Group is one of the main Italian players operating worldwide in business consulting and system integration to support technological and digital transformation. This new collaboration confirms Fincons' desire to innovate by bringing value to its customers and actively accompanying them in their digital transformation.

Chairman of the Board of Directors  
Stefano Spaggiari



[www.expertsystem.com](http://www.expertsystem.com)

[ir@expertsystem.com](mailto:ir@expertsystem.com)

**Registered office**

Rovereto (TN)  
Via Fortunato Zeni 8  
38068 Rovereto (TN) - Italy  
Tel. +39 0464 443300

**Administrative offices**

Modena (MO)  
Via Virgilio 56/Q  
41123 Modena (MO) - Italy  
Tel. +39 059 894011  
Fax: +39 059 894099