



**EXPERT SYSTEM S.P.A.  
FINANCIAL STATEMENTS  
AS AT 31/12/2019**



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## CORPORATE BODIES

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### Board of Directors

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

### Board of Statutory Auditors

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

# MANAGEMENT REPORT OF THE FINANCIAL STATEMENTS AS AT 31/12/2019

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Dear Shareholders,

the year that ended on 31/12/2019 shows a positive result of Euro 2,614,341, compared to a positive result of the previous year of Euro 1,584,789.

**Company situation and operating performance (costs, revenues and investments), description of risks - analysis of the main performance indicators (Art. 2428, paragraphs 1 and 2 of the Italian Civil Code)**

## OPERATING CONDITIONS AND BUSINESS DEVELOPMENT

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

According to Gartner, the well-known analyst, over 90% of corporate strategies will be heavily based on insight and analytics built around the classification of unstructured data and information. Gartner, in its *Predicts 2019: Data and Analytics Strategy* report, also argues that, as from 2022, Chief Data Officers will play a key role in increasing the value of intangible corporate assets. To date, the strengthening of human skills resulting from the adoption of Artificial Intelligence applied to business documents is producing \$2.9 trillion in value added and 6.2 billion hours saved; between 2018 and 2019, the number of organisations that adopted Artificial Intelligence solutions increased from 4% to 14%<sup>1</sup>.

Overall, the global artificial intelligence (AI) market, whose value in 2016 was \$4.06 billion, is projected to reach \$169.41 billion by 2025, registering a CAGR of 55.6% in the period.

The performance of the Expert System share price as of 27/03/2020 is shown below

Market	AIM Italia - MAC
Share capital	€ 400.161
Capitalisation	€ 92.217.036
Minimum lot	1,00
Reference price	€ 2,20 – 27/03/2020 h 17.35.06
Official price	€ 2,3045 – 26/03/2020
Performance - 1 month	- 13,39%
Performance - 6 months	- 31,25%
Performance - 1 year	+ 33,74%

It should be noted that the current share price is influenced by the reaction of operators to the serious situation connected with the health emergency caused by Coronavirus, by the threat to the global economy resulting from the necessary measures taken to control the outbreak and by the potential domino effect that might lead to a global recession.

In order to meet market demand, where more and more organisations need to manage large volumes of data and textual information and call for the acceleration and simplification of the adoption of artificial intelligence in their processes, Expert System released Cogito® 14.4 at the end of April 2019. The new release of Cogito, which Expert System's entire commercial

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<sup>1</sup> Top Trends on the Gartner Hype Cycle for Artificial Intelligence, Nov. 2019

offer is based on, further speeds up the acquisition of new knowledge by enriching the knowledge graph; it improves machine learning by exploiting the interaction with users and adds intelligence to process automation, easily integrating into Robotic Process Automation (RPA) platforms. The Expert System knowledge graph, which is at the heart of Cogito, is the richest conceptual database on the market for the understanding of natural language. In order to allow organisations to more easily enrich and customise knowledge already present in the knowledge graph, new features have been introduced to import specific knowledge from any type of information source (e.g. internal archives but also external resources such as Wikipedia or Geonames) and to duly identify references to entities such as people, companies, places, etc.. The new Cogito release speeds up the implementation of projects using advanced machine learning techniques. Through an intuitive web application, even the least experienced users can interact with the system to speed up and increase the accuracy of the extraction of data used for the development of the machine learning model. All the most troublesome steps of the process are thus simplified, such as the initial steps typically based on the use of manually annotated datasets. In addition to reducing the amount of manual work, the possibility to intervene at any time during the process solves the problem of having to start over each time, ensuring precise and timely data quality control. Lastly, a specific connector ensures that Cogito functionalities can be incorporated into the most popular Robotic Process Automation (RPA) platforms to extend automation to complex processes, which require cognitive capabilities that are similar to human ones.

With regard to the development of the indirect channel, in April the e-learning platform for the use and programming of Cogito was made available with the aim of allowing ever larger groups of users to access increasingly intelligent solutions, which can deeply transform business processes. The launch of this path, which has so far led to the issue of 216 certifications to an equal number of professionals from 33 companies in 19 different countries, will help support the Group's future revenues, increasing at the same time the efficiency offered to corporate customers, so as to take full advantage of all the features included in the Cogito platform and integrate it with the best solutions available on the market.

In 2019 Expert System announced the availability in the Cogito® artificial intelligence technology of the "Creative Works Ontology" designed by MovieLabs, the non-profit research

and development association founded by Hollywood's leading film studios to help companies in the film industry adapt their infrastructure to a market scenario that is increasingly oriented to data use.

The main objective of the Creative Works Ontology by MovieLabs is to provide a structured and formal representation of cinema/TV-related knowledge, making the organisation of content of the reference domain easier and more accurate and providing a rich and scalable metadata base, so as to offer the interoperability of metadata and the complete integration of data from different systems to producers, distribution platforms and media service providers.

With the availability of the "Creative Works" ontology as a Cogito module, media organisations will be able to simplify, automate and accelerate data organisation, a process that would otherwise be entirely manual and time-consuming. This will accelerate the creation of even more innovative search, navigation and recommendation engines for customers in the media industry, while also improving their analytical activities.

In the course of the year that ended on 31/12/2019, Expert System promoted various international conventions and meetings concerning business applications in the field of artificial intelligence.

In October, Expert System held the Cogito AI Day 2019 conference focused on analysing the state of the art and future scenarios of artificial intelligence, with a rich programme of presentations, debates and workshops dedicated to the applications and benefits of Artificial Intelligence, which was attended by companies, analysts and industry experts. During the event, which Marco Varone, President and CTO of Expert System, and Mike Gualtieri, VP & Principal Analyst of Forrester Research also took part in, several customers discussed their positive experience in the implementation of AI projects in public and private sectors; testimonials of companies such as Unipol, Illimity Bank and the Emilia Romagna Region also attended the event.

The participants, discussing automation, technologies and ecosystems for innovation, exchanged their views on competitiveness and efficiency, two concepts that are closely linked, now more than ever before, to the ability to organise and enhance information contained in data to achieve tangible and measurable results.

The 6th edition of the IT Day was held in Milan, an event organised by Banca IMI that brought together IT leading companies and the world of investors; the event focused on innovation, infrastructure and human capital and how these areas are influenced by business digitization. During the plenary session of the IT Day, Stefano Spaggiari, CEO of Expert System, discussed emerging artificial intelligence technologies in detail and illustrated concrete cases of their application, underlining their benefits both for society and the business world.

Lastly, Expert System participated as a sponsor and exhibitor in the 57th edition of the Association for Computational Linguistics (ACL) Annual Conference, which was held in Florence. This was a major event in the field of computational linguistics that brought together industry experts, scholars and entrepreneurs to discuss and exchange their views on the combination of computational approaches and natural language.

The company intends to grow further primarily by increasing its penetration in the markets already covered by its current offer, particularly in the USA where it intends to replicate the many successful case histories experienced in Europe, especially in the insurance and banking sectors. The company also wants to further establish itself as a provider of a horizontal platform that can meet any AI Text Analytics needs. Also for this reason, it intends to accelerate its growth in the indirect channel by providing tools that allow it to be independent in the development and integration of solutions and projects. Expert System also intends to further increase its share of recurring licenses compared to perpetual licenses and increase installations in the Cloud and Saas, in order to increase the marginality and profitability of projects.

As at 31/12/2019, the Expert System Group included the following direct or indirect subsidiaries:

COMPANY	Ownership	Indirect ownership through	Control	Business
Expert System USA Inc.	100.00%	n.a.	YES	Information Technology activities on semantic software
Expert System Enterprise Corp.	100.00%	Expert System France S.A.	YES	Information Technology activities on semantic software
Expert System Cogito Ltd.	100.00%	n.a.	YES	Information Technology activities on semantic software



Expert System Iberia S.L.U.	100.00%	n.a.	YES	Information activities on semantic software	Technology
Expert System France S.A.	100.00%	n.a.	YES	Information activities on semantic software	Technology
Expert System Canada - Semantic Technologies Inc.	100.00%	Expert System France S.A.	YES	Information activities on semantic software	Technology
Expert System Deutschland GMBH	100.00%	Expert System France S.A.	YES	Information activities on semantic software	Technology

The list of subsidiaries does not include ADmantX S.p.A. or its subsidiary ADmantX Inc.; both companies in which Expert System held a 60.8% stake, which provide semantic solutions for the advertising market, were sold on 20/11/2019 to Integral AD Science (IAS), a global leader in digital ad verification. In the light of the Euro 16 million enterprise value of ADmantX, corresponding to 8X of the 2018 sales of ADmantX, IAS acquired 100% of the shares in cash, including the participation of Expert System, which was sold for Euro 7 million.

## OPERATING PERFORMANCE

### General economic performance

During 2019, international trade returned to grow and there were signs that the tariff disputes between the United States and China were easing. However, the outlook continues to be uncertain and geopolitical tensions are on the increase. Less pessimistic growth expectations, buoyed by the accommodative stance of the central banks, have nonetheless driven up share prices and facilitated a moderate recovery in long-term yields.

In the euro zone, economic activity has been held back by the weakness of the manufacturing industry, especially in Germany despite a higher than expected performance in November; although growth in the service sector has been stronger up until now, there remains the risk that it could also be affected. Economic developments have an impact on inflation, which in the Eurosystem's projections is supported by monetary stimulus but is still expected to be below 2% over the next three years. Therefore, the ECB Governing Council has reconfirmed the need to maintain its current accommodative stance.

In Italy, economic activity, which grew slightly in the third quarter of the year, remained almost unchanged in the fourth quarter, continuing to be affected mainly by the weakness of the manufacturing sector. According to surveys conducted by ISTAT [Italian Statistics Office] and Bank of Italy, firms have expressed slightly more favourable assessments of orders and foreign demand, but uncertainty and trade tensions continue to be viewed as factors that hinder their business. In 2020 companies plan to increase investments, albeit to a lesser extent than in the previous year.

In the third quarter of 2019, the number of people employed increased slightly, especially in the service sector; the data available indicate an expansion also in the last months of the year. Contractual wage growth is positive (0.7 per cent year-on-year), although it is diminishing, reflecting the fact that significant sectors of the economy are still waiting for the renewal of collective bargaining agreements.

Inflation (0.5% in December) is contained. Services are the main contributors to price dynamics, while growth in the price of industrial goods is still modest. Core inflation slightly picked up in the autumn, rising to 0.7%. Companies' inflation expectations have slightly decreased in the latest surveys.

Since mid-October, Italian government bond yields and share prices have been rising, reflecting a similar trend in other Eurozone countries, as well as the publication of some better than expected economic data for the area. The yields on bonds issued by Italian banks and non-financial corporations have remained substantially unchanged at more than 70 basis points below the average levels recorded in the first half of 2019.

The cost of credit has fallen, significantly so for households. For the latter, growth in lending remains solid, while it is negative for firms, mainly reflecting weak demand for loans based on surveys. According to banks, the measures adopted in September by the ECB Governing Council will promote an improvement in credit conditions.

The preliminary data available for 2019 indicate a slight decline in the ratio of general government net borrowing to GDP and an increase in the debt-to-GDP ratio. The budgetary provisions for the three years 2020-22, approved by Parliament last December, increased net borrowing by 0.7 percentage points of GDP on average per year compared with its current-legislation levels. The Government's plans indicated that net borrowing and debt, after stabilizing in 2020, would decline in the following two years.

The projections for the Italian economy in the three-year period 2020-2022 assumed: modest growth in world trade, although gradually recovering; accommodative monetary conditions, in line with the stance confirmed by the ECB Governing Council; orderly developments in Italian financial markets, resulting in low credit costs for firms. Based on these assumptions, the central projection indicated an increase of 0.5 in GDP in 2020, 0.9 in 2021 and 1.1 in 2022. It was believed that growth was still exposed to significant risks, linked to increasing geopolitical uncertainty, only partly resolved trade conflicts and the weak economic performance of our main European partners. It was also assumed that any delay in implementing the large increases in planned public investment, which had been incorporated in the forecasting scenario, or a renewal of tensions on the financial markets, could lead to growth being lower than projected.\*

The above assessments were made before the global emergency linked to the spread of Coronavirus, an event that will have profound implications across global economic scenarios from 2020 and for the years to come. To date, it is not known how macroeconomic indicators will evolve once the emergency is over, i.e. whether there will be a rapid recovery to pre-pandemic levels or whether, in a less optimistic view, there will be a slowdown in the global economy or, in the worst case scenario, a recession.

*\*(Source: Bank of Italy Economic Bulletin 1/2020)*

## **Economic performance of the company**

The year that ended on 31/12/2019 closed with a Euro 2,614,341 profit.

The table below shows the results achieved in the last two years in terms of value of production, gross operating margin and result before taxes.

	<b>31/12/2019</b>	<b>31/12/2018</b>
Value of production	26,222,192	23,112,851
Gross operating margin	5,541,714	6,813,100
Result before taxes	2,919,615	2,470,622

The value of production, equal to Euro 26.2 million, increased by about 13.5% compared to the previous year, which closed at Euro 23.1 million. This increase was absorbed by the growth in personnel costs (approximately 13%), the growth in costs for services (approximately 56%) and in costs for the use of third-party assets (approximately 64%), thus accounting for the

reduction in margins compared to the previous year, with Euro 5.5 million EBITDA, down by approximately 19% compared to the figure of Euro 6.8 million posted in 2018.

The increase in the result before taxes, positive by Euro 2.9 million compared to Euro 2.5 million of the previous year, is due to the capital gain of Euro 2.2 million resulting from the sale of the stake in the subsidiary Admantx to Integral Ad Science (IAS) at a price of Euro 7 million.

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 and the most significant financial statement ratios.

## Main economic data

The reclassified income statement of the company, compared with the previous year's, is as follows (in Euro):

Main economic data	31/12/2019	31/12/2018	Change
Net revenues	20,641,036	18,977,922	1,663,114
Change in inventories	0	(39,209)	39,209
Increases in fixed assets for internal work	4,331,302	3,101,046	1,230,256
Grants for current expenses	0	2,000	(2,000)
Grants for plants	477,714	500,456	(22,742)
Other income	772,140	570,636	201,504
External costs	(11,610,035)	(8,275,135)	(3,334,900)
<b>Added value</b>	<b>14,612,157</b>	<b>14,837,716</b>	<b>(225,559)</b>
Labour costs	(9,070,443)	(8,024,616)	(1,045,827)
<b>Gross Operating Margin</b>	<b>5,541,714</b>	<b>6,813,100</b>	<b>(1,271,386)</b>
Depreciation, amortisation, write-downs and other provisions	(4,781,697)	(4,541,857)	(239,840)
<b>Operating Result</b>	<b>760,017</b>	<b>2,271,243</b>	<b>(1,511,226)</b>
Financial income and charges	2,159,598	199,379	1,960,219
<b>Ordinary Result</b>	<b>2,919,615</b>	<b>2,470,622</b>	<b>448,993</b>
Net extraordinary components	0	0	0
<b>Result before taxes</b>	<b>2,919,615</b>	<b>2,470,622</b>	<b>448,993</b>
Income taxes	(305,274)	(885,833)	580,559
<b>Net result</b>	<b>2,614,341</b>	<b>1,584,789</b>	<b>1,029,552</b>

The table above shows that sales revenues amounted to approximately Euro 20.6 million in 2019, up by approximately 9% compared to 2018.

Fixed assets for internal work rose by about 40% compared to 2019; this figure is very significant and is evidence of the company's commitment to the development of technologies and applications with a high innovative content.

External operating costs increased by about 40%, from Euro 8.3 million to Euro 11.6 million.

Personnel costs, on the other hand, rose by 13% from Euro 8 million to Euro 9 million.

As a result of the above, the gross operating margin (EBITDA) as at 31/12/2019 was Euro 5.5 million, down by approximately 18.5% compared to 2018.

Therefore, also EBIT fell to Euro 0.76 million compared with Euro 2.3 million as at 31/12/2018; as in 2018, the figure was affected by the write-down of the company's equity investment in two foreign subsidiaries for a total of Euro 1 million.

Financial management, positive by Euro 2.2 million (positive by Euro 0.2 million as at 31/12/2018), was strongly influenced by the capital gain deriving from the sale of an equity investment in a subsidiary (also equal to Euro 2.2 million). In any case we should mention the substantial balance in the value of financial charges (Euro 0.4 million in 2018 and Euro 0.5 million in 2019) incurred to cover the debt to banks and the subscribers of the two bonds, and the positive effect of the exposure in dollars, accounting for Euro 0.25 million, due to unrealised foreign exchange gains mainly related to intercompany loan agreements.

A better description of the company's income situation is shown in the table below, which compares specific profitability ratios with the same ratios of previous years' financial statements.

	31/12/2019	31/12/2018
Net ROE	0.06	0.04
Gross ROE	0.06	0.07
ROI	0.03	0.06
ROS	0.09	0.17

## Main balance sheet data

The company's reclassified balance sheet compared with the previous year's is as follows (in Euro):

Balance Sheet	31/12/2019	31/12/2018	Change
Net intangible fixed assets	7,947,601	6,903,124	1,044,477
Net tangible fixed assets	580,337	582,182	(1,845)

Equity investments and other financial fixed assets	33,574,842	31,646,478	1,928,364
<b>Fixed capital</b>	<b>42,102,780</b>	<b>39,131,784</b>	<b>2,970,996</b>
Short-term financial assets	0	4,775,574	(4,775,574)
Inventories	0	0	0
Receivables from customers	13,650,700	9,766,201	3,884,500
Other receivables	11,572,275	8,666,223	2,906,052
Accrued income and prepaid expenses	235,783	413,459	(177,676)
<b>Short-term operating assets</b>	<b>25,458,758</b>	<b>23,621,457</b>	<b>1,837,301</b>
Payables to suppliers	(3,907,968)	(2,015,347)	(1,892,622)
Advances	(311,099)	(234,980)	(76,118)
Tax and social security payables	(1,111,606)	(1,201,166)	89,559
Other debts	(1,852,173)	(1,762,690)	(89,483)
Accrued expenses and deferred income	(1,311,895)	(908,668)	(403,227)
<b>Short-term operating liabilities</b>	<b>(8,494,741)</b>	<b>(6,122,851)</b>	<b>(2,371,890)</b>
<b>Net working capital</b>	<b>16,964,017</b>	<b>17,498,606</b>	<b>(534,589)</b>
Severance pay	(2,312,384)	(2,143,307)	(169,077)
Tax and social security payables	0	0	0
Accrued expenses and deferred income due after 12 months	(2,362,899)	(2,141,052)	(221,847)
Other medium and long-term liabilities	(575,440)	(456,248)	(119,191)
<b>Medium-term liabilities</b>	<b>(5,250,722)</b>	<b>(4,740,607)</b>	<b>(510,115)</b>
<b>CAPITAL EMPLOYED</b>	<b>53,816,074</b>	<b>51,889,782</b>	<b>1,926,292</b>
Shareholders' Equity	(48,446,737)	(38,754,162)	(9,692,575)
Net financial position in the medium and long term	(17,919,628)	(13,642,341)	(4,277,287)
Short-term net financial position	12,550,290	506,720	12,043,570
<b>EQUITY AND NET FINANCIAL DEBT</b>	<b>(53,816,074)</b>	<b>(51,889,782)</b>	<b>(1,926,292)</b>

The change in fixed assets, which increased by Euro 3 million in 2019, is mainly due to the increase in equity investments (net of write-down provisions amounting to Euro 2 million) and other financial fixed assets, which increased by Euro 1.9 million, net of Euro 0.1 million in unrealised exchange gains, mainly due to additional loans granted to subsidiaries and associated companies during the year (Euro 2.6 million including interest, compared with Euro 2.3 million in 2018). Lastly, the amount due after 12 months for grants for research projects increased by Euro 0.5 million.

Overall, there was a reversal of the trend compared to 2018, when there was a substantial balance between fixed assets and shareholders' equity (both equal to approximately Euro 39 million), given that in 2019 shareholders' equity amounted to Euro 48 million, while fixed

assets amounted to Euro 42 million, thus showing that long-term investments are largely funded using the company's own resources.

During the year, exposure to banks and other lenders increased by Euro 0.1 million due to new disbursements received during the year for Euro 8.3 million against repayments made for a total of Euro 8.2 million.

As regards current operations, short-term assets rose by Euro 1.8 million, mainly due to the joint effect of the sale of the stake in a subsidiary that was posted under current assets for Euro 4.7 million and the positive change in trade receivables, up by Euro 3.9 million, and the increase in other receivables, which rose by Euro 2.9 million.

Current liabilities increased by Euro 2.4 million mainly due to the combined effect of the Euro 1.9 million increase in trade payables and the Euro 0.4 million increase in accruals and deferrals.

The difference between current assets and liabilities decreased to Euro 17 million (Euro 17.5 million in 2018), falling by Euro 0.5 million compared with the previous year.

Finally, medium and long-term liabilities decreased by Euro 0.5 million mainly as a result of the Euro 0.2 million increase in accrued expenses and deferred income due after 12 months and the Euro 0.17 million increase in Severance pay.

Confirming the equity solidity of the company, which was further strengthened compared to the previous year, 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 previous year's financial statements.

	31/12/2019	31/12/2018
Fixed asset to equity capital margin	6,343,957	(377,622)
Fixed asset to equity capital ratio	1.15	0.99
Fixed asset to equity capital and medium-long term debt margin	27,151,409	15,864,274
Fixed asset to equity capital and medium-long term debt ratio	1.64	1.41

## Fixed asset to equity capital margin and related fixed assets coverage ratio

These are two ratios that show how the company funds its fixed assets.

The *Fixed asset to equity capital margin* and its *ratio*, which correlate the value of shareholders' equity with fixed assets (as quantified in the table above), provide information on the company's ability to finance all its fixed assets with internally acquired capital.

### Fixed asset to equity capital margin: shareholders' equity - fixed assets

<b>Shareholders' Equity</b>	<b>48,446,735</b>
Net intangible fixed assets	7,947,600
Net tangible fixed assets	580,337
Equity investments and other financial fixed assets	33,574,841
<b>Fixed capital</b>	<b>42,102,778</b>
<b>Fixed asset to equity capital margin</b>	<b>6,343,957</b>
<b>Fixed asset to equity capital ratio</b>	<b>1.15</b>

The result of the fixed asset to equity capital margin with the related ratio, which is higher than the unit, shows that the company is perfectly capable, with its permanent financing, of meeting financial commitments generated by long-term investments.

The *Fixed asset to equity capital and medium-long term debt margin* with its related *ratio* refer also to medium/long-term liabilities, showing, in the case of Expert System S.p.A., an optimal correlation between resources and medium and long-term investments.

### Fixed asset to equity capital and medium-long term debt margin:

Shareholders' Equity	48,446,735
Net financial position in the medium and long term	17,919,628
Other medium and long-term liabilities	575,440
Severance pay	2,312,384
Fixed capital	(42,102,778)
<b>Fixed asset to equity capital and medium-long term debt margin</b>	<b>27,151,409</b>
<b>Fixed asset to equity capital and medium-long term debt ratio</b>	<b>1.64</b>



## Main financial data

As at 31/12/2019 the net financial position of Expert System S.p.A. was negative and equal to Euro 5.4 million, improving by Euro 7.7 million compared to the negative figure of Euro 13.1 million of the previous year.

The table below shows the items that generated this improvement.

Net Financial Position	31/12/2019	31/12/2018	Change
Bank deposits	18,408,703	5,550,033	12,858,670
Cash on hand	2,200	2,144	56
<b>Cash and cash equivalents</b>	<b>18,410,903</b>	<b>5,552,177</b>	<b>12,858,726</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)
Payables to shareholders for loans (within 12 months)			
Bank debt (within 12 months)	(4,831,142)	(4,925,611)	94,469
Payables to other lenders (within 12 months)	(128,771)	(128,245)	(526)
Advances for foreign payments			
Short-term portion of financing			
Financial receivables			
<b>Short-term financial debts</b>	<b>(5,869,013)</b>	<b>(5,053,856)</b>	<b>(815,157)</b>
<b>Short-term net financial position</b>	<b>12,550,290</b>	<b>506,721</b>	<b>12,043,569</b>
Bonds and convertible bonds (after 12 months)	(9,090,900)	(5,000,000)	(4,090,900)
Payables to shareholders for loans (after 12 months)			
Bank debt (after 12 months)	(8,439,239)	(8,124,081)	(315,158)
Payables to other lenders (after 12 months)	(389,489)	(518,260)	128,771
Advances for foreign payments			
Long-term portion of financing			
Financial receivables			
<b>Medium/long-term net financial position</b>	<b>(17,919,628)</b>	<b>(13,642,341)</b>	<b>(4,277,287)</b>
<b>NET FINANCIAL POSITION</b>	<b>(5,369,338)</b>	<b>(13,135,620)</b>	<b>7,766,282</b>

The ratios shown below, compared with the same ratios of the previous year, confirm this trend.

	31/12/2019	31/12/2018
Quick ratio	3.05	2.61
Current ratio	3.05	2.61
Indebtedness	0.70	0.68
Equity to fixed assets ratio	1.64	1.41

## Quick ratio

### CASH AND CASH EQUIVALENTS

Banks and current account credit balances	18,408,703
Cash balance	2,200
<b>Cash and cash equivalents</b>	<b>18,410,903</b>

### DEFERRED LIQUIDITY

Receivables from customers (within 12 months)	13,650,700
Receivables from subsidiaries (within 12 months)	8,790,629
Tax receivables (within 12 months)	532,312
Deferred tax assets (within 12 months)	70,042
Receivables from others (within 12 months)	2,179,293
Financial assets not constituting fixed assets	8,400
Accrued income and prepaid expenses	235,783
<b>Deferred liquidity</b>	<b>25,467,159</b>

### CURRENT LIABILITIES

Bonds payable (within 12 months)	909,100
Bank debt (within 12 months)	4,831,142
Payables to other lenders (within 12 months)	128,771
Advances (within 12 months)	311,099
Payables to suppliers (within 12 months)	3,907,968
Payables to subsidiaries (within 12 months)	171,143
Tax payables (within 12 months)	667,917
Due to social security and welfare institutions (within 12 months)	443,689
Other payables (within 12 months)	1,681,030
Accrued expenses and deferred income (within 12 months)	1,311,895
<b>Current liabilities</b>	<b>14,363,754</b>

These are the formulas.

Quick ratio: (Li+DI) / Cl

$$(18,410,903+25,467,159) / 14,363,754 = 3.05$$

The 3.05 quick ratio shows that the revenues generated by the more liquid items of current assets are largely able to cover short-term expenses represented by current liabilities.

## Current ratio

CA (including inventory) / CL

$$(18,410,903+25,467,159) / 14,363,754 = 3.05$$

The current ratio, which is itself equal to 3.05 as there were no inventories as at 31/12/2019, is to be considered positive.

## Leverage ratio

Loan capital/equity

<b>Current liabilities without accruals and deferrals (A)</b>	<b>13,051,859</b>
Bonds payable (after 12 months)	9,090,900
Bank debt (after 12 months)	8,439,239
Payables to other lenders (after 12 months)	389,489
Advances (after 12 months)	341,705
Provisions for risks and charges	233,735
Severance pay	2,312,384
<b>M/L-term liabilities (B)</b>	<b>20,807,452</b>
<b>TOTAL LOAN CAPITAL (A+B)</b>	<b>33,859,311</b>

Loan capital = 33,859,311

Equity = 48,446,735

$$\text{Leverage ratio} = 33,859,311 / 48,446,735 = 0.70$$

The leverage ratio shows the ratio of debt to equity, which can be used to assess the risk associated with a company's level of dependence on loan capital. The 0.70 ratio shows that Expert System has mainly used internal financing, thereby limiting the entrepreneurial risk linked to the burden of financial charges deriving from loan capital.

## Equity to fixed assets ratio

<b>Equity (A)</b>	<b>48,446,735</b>
Bonds payable (after 12 months)	9,090,900
Bank debt (after 12 months)	8,439,239

Payables to other lenders (after 12 months)	389,489
Advances (after 12 months)	341,705
Provisions for risks and charges	233,735
Severance pay	2,312,384
<b>M/L-term liabilities (B)</b>	<b>20,807,452</b>
Net intangible fixed assets	7,947,600
Net tangible fixed assets	580,337
Equity investments and other financial fixed assets	33,574,841
<b>Fixed assets (C)</b>	<b>42,102,778</b>
<b>Equity to fixed assets ratio (A+B)/C</b>	<b>1.64</b>

The 1.64 equity to fixed assets ratio shows that fixed assets, and therefore long-term investments, are entirely financed with consolidated debt.

## Investments

During the year, investments were made in the following areas:

Fixed assets	Acquisitions during the year
Land and buildings	0
Plant and machinery	5,015
Industrial and commercial equipment	0
Other goods	121,806

## Environmental and personnel information

Considering the social role of the company, as also highlighted in the document on the management report issued by the National Council of Accountants and Bookkeepers, it is appropriate to provide the following information regarding the environment and personnel.

### Personnel

During the year, 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 register and no charges for occupational illnesses involving employees or former employees and no mobbing cases.

During the year Expert System also invested in personnel safety in compliance with Italian Legislative Decree 81/08. In fact, all employees were trained with regard to the safety of workers and supervisors, and refresher courses were held for first aid and fire-fighting personnel.

## Environment

During the year, no damage was caused to the environment for which Expert System was definitively found guilty. During the year, 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 13/09/2019, is valid until 28/06/2020.

## Risks

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 31/12/2019	Average exchange rate in 2019
USD	1.1234	1.1195
CAN	1.4598	1.4855
GBP	0.85080	0.87777

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.

### **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.

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.

### **Research and development (Art. 2428, paragraph 3, point 1, of the Italian Civil Code)**

Within Expert System's strategy, significant investments in research and development have been and continue to be crucial to 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.

As for the development tools used for the customisation of projects, most efforts were centred around the creation of a completely new version of Cogito Studio that will be released by April 2020 and with which it is will be possible to create custom projects in a much easier and faster way.

The increase in activities compared to the previous year allowed the company to implement the first version of the Cogito APIs, which were made available to a small group of customers for the first trials at the end of 2019 and will be released by the second quarter of 2020.

The third most strategic front for the future was represented in the year by the early stages of implementation of a new component that can analyse a PDF document, recognise its structure and identify its most important elements: for a better understanding of the content of a document, in addition to the actual text, it is often very important to recognise the layout of the document and its formatting. The component will be able to recognise the following elements of the document: titles and subtitles, indexes, text columns, tables, headers and footers, text formatting, bulleted and numbered lists.

Other significant activities pursued during the year were:

- release of the new version of Cogito intelligence Platform
- release of the beta version of Cogito for Life Science
- restructuring and expansion of the knowledge graph for several languages (German, Arabic, Dutch, Chinese, Russian)
- enhancement of the C and E language used within Cogito Studio to create categorisation and extraction projects
- new developments on the intelligent analysis of complex documents.

### **Relations with group companies (Art. 2428, paragraph 3, point 2, of the Italian Civil Code)**

These relations are illustrated in the relevant section of the Notes to Accounts.

### **Treasury shares and shares or units of parent companies (Art. 2428, paragraph 3, points 3 and 4, of the Italian Civil Code)**

Please find below an in-depth illustration of the direct or indirect ownership of treasury shares or shares of parent companies.

Description	Number owned	Nominal value	Share capital (%)
Treasury shares			
Shares/units			
Parent companies			

Shares/units acquired	Number	Nominal value	Capital (%)	Price
Treasury shares				
Shares/units				
Parent companies				

Shares/units sold	Number	Nominal value	Capital (%)	Price
Treasury shares	64,431		0.16%	-
Treasury shares	12,278		0.03%	22,100
Shares/units				
Parent companies				

### Changes in operations (Art. 2428, paragraph 3, point 6, of the Italian Civil Code)

The 2020 financial year, which got off to a good start, will inevitably have to take into account the impact that the health crisis may have both at Italian and international level. The company immediately took and has further taken all steps to give absolute continuity to its business thanks to smart working; however, the continuation of this situation might postpone activities in progress or the implementation of new projects. It is still too early to make meaningful assessments, which can only be made once the peak of the crisis is over.

Regardless of this contingent and temporary situation, the company confirms its intention to further grow internationally, both directly and indirectly, starting from the USA where there is still tremendous potential for the best practices developed in Europe, also considering the general growing demand for solutions based on artificial intelligence algorithms.

### Use of financial instruments (Art. 2428, paragraph 3, point 6-bis, of the Italian Civil Code)

The company 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 30/01/2023;
- 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 30/01/2023;
- Notional amount at the reference date (31/12/2019): Euro 700,000;
- amount of liability hedged at the reference date (31/12/2019): Euro 700,000.
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 11,916.55;
- 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 31/12/2022;
- 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 31/12/2022;
- Notional amount at the reference date (31/12/2019): Euro 266,667;
- amount of liability hedged at the reference date (31/12/2019): Euro 266,667;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 2,359.20;
- 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 (31/12/2019): Euro 5,000,000;
- amount of liability hedged at the reference date (31/12/2019): Euro 5,000,000;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 23,313.32;
- 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 24/10/2021;
- 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 24/10/2021;
- Notional amount at the reference date (31/12/2019): Euro 670,589;
- Amount of liability hedged at the reference date (31/12/2019): Euro 670,589;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 4,059.71;
- Fair value when the hedge was created: zero.

e) CREDIT AGRICOLE

- Type of derivative contract: Unlisted I.R.S. no. 69745/2019 signed on 22/05/2019 and expiring on 22/05/2024;
- 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 22/05/2024;

- Notional amount at the reference date (31/12/2019): Euro 901,986;
- amount of liability hedged at the reference date (31/12/2019): Euro 901,986;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 11,803.66;
- fair value when the hedge was created: zero.

f) INTESA SANPAOLO

- Type of derivative contract: Unlisted I.R.S. no. 31011814 signed on 28/06/2019 and expiring on 15/06/2023;
- 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 15/06/2023;
- Notional amount at the reference date (31/12/2019): Euro 437,500;
- amount of liability hedged at the reference date (31/12/2019): Euro 437,500.
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 1,450.00;
- fair value when the hedge was created: zero.

g) BNL

- Unlisted OTC derivative contract on interest rates signed on 11/07/2019 and expiring on 11/07/2022;
- 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 17/07/2022;
- Notional amount at the reference date (31/12/2019): Euro 1,375,000;
- Amount of liability hedged at the reference date (31/12/2019): Euro 1,375,000;

- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value positive by Euro 646.07;
- Fair value when the hedge was created: zero.

h) BPER BANK

- “Interest Rate Option Cap Premium Running” unlisted OTC derivative contract on interest rates signed on 01/07/2019 and expiring on 24/06/2022;
- 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 24/06/2022;
- Notional amount at the reference date (31/12/2019): Euro 2,632,824;
- Amount of liability hedged at the reference date (31/12/2019): Euro 2,632,824;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 11,181.18;
- 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.

### List of secondary offices (Art. 2428, paragraph 5, of the Italian Civil Code)

In compliance with the provisions of Art. 2428 of the Italian Civil Code, the company's secondary operating offices are shown below:

Address	Location
Piazza Cavour 7	20121 Milan (MI)
Viale Virgilio 56/Q	41123 Modena (MO)

Viale Virgilio 48/H	41123 Modena (MO)
Viale Virgilio 58/M1	41123 Modena (MO)
Via Nuova Poggioreale 60/L	80143 Naples (NA)
Via dei Mille 35	00185 Rome (RM)
Strada le Grazie 15	37134 Verona (VR)

## Conclusions

The financial statements that have been submitted for your approval have been clearly and accurately prepared and provide a truthful and accurate account of the Company's financial position and results of operations for the year, as required by article 2423 *et seq.* of the Italian Civil Code. No provision of law is incompatible with the aforementioned truthful and accurate account.

From an economic point of view, all operating events have been recorded on an accrual basis; from an equity point of view, the financial statements have been prepared in compliance with the legal valuation criteria set out in Art. 2426 of the Italian Civil Code.

This Management Report meets the obligation of directors to prepare a specific report as under the first paragraph of Art. 2428 of the Italian Civil Code.

In the light of the measures taken by the Italian Parliament to deal with the Coronavirus emergency (article 106 of Decree Law 18/2020 in force since 17 March 2020 - so called "Curaitalia" decree), the Board of Directors will call the shareholders' meeting for the approval of the 2019 financial statements within 180 days from the end of the financial year. As pointed out by authoritative scholars (Assonime, note of 19 March 2020), the directors' adoption of a specific postponement resolution by the end of March or, in any case, within 120 days, is not deemed necessary.

The Chairman of the Board of Directors

Marco Varone



# FINANCIAL STATEMENTS AS AT 31/12/2019

## BALANCE SHEET

ASSETS	31/12/2019	31/12/2018
<b>A) SUBSCRIBED CAPITAL, UNPAID</b>		
<b>Total subscribed capital, unpaid (A)</b>	<b>0</b>	<b>0</b>
<b>B) FIXED ASSETS</b>		
<i>I - Intangible fixed assets</i>		
1) Start-up and expansion costs	203,099	298,906
2) Development costs	7,197,467	6,207,423
3) Industrial patent rights and intellectual property rights	544,554	393,663
4) Concessions, licenses, trademarks and similar rights	2,480	3,132
5) Goodwill	0	0
6) Assets under construction and advances	0	0
7) Other intangible fixed assets	0	0
Total intangible fixed assets (I)	7,947,600	6,903,124
<i>II - Tangible fixed assets</i>		
1) Land and buildings	340,562	351,650
2) Plants and machinery	5,954	4,994
4) Other tangible fixed assets	233,821	225,538
Total tangible fixed assets (II)	580,337	582,182
<i>III - Financial fixed assets</i>		

1) Equity investments in:		
a) Subsidiaries	16,843,407	16,043,407
b) Associated companies	0	0
d) Other companies	308,271	308,271
Total equity investments (1)	17,151,678	16,351,678
2) Receivables		
a) From subsidiaries		
Due within 12 months	710,894	603,533
Due after 12 months	13,272,224	12,551,972
Total receivables from subsidiaries	13,983,118	13,155,505
d-bis) From others		
Due within 12 months	427,181	321,555
Due after 12 months	150,000	390,000
Total receivables from others	577,181	711,555
Total receivables (2)	14,560,299	13,867,060
Total financial fixed assets (III)	31,711,977	30,218,738

<b>Total fixed assets (B)</b>	<b>40,239,914</b>	<b>37,704,044</b>
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### C) CURRENT ASSETS

#### I) Inventory

3) Work in process on long-term contracts	0	0
Total inventory (I)	0	0

#### II) Receivables

##### 1) From customers

Due within 12 months	13,650,700	9,766,201
Total receivables from customers (1)	13,650,700	9,766,201

2) From subsidiaries		
Due within 12 months	8,790,629	6,073,715
Due after 12 months	0	26,787
Total receivables from subsidiaries (2)	8,790,629	6,100,502
4-bis) Tax receivables		
Due within 12 months	532,312	403,227
Total tax receivables (4-bis)	532,312	403,227
4-ter) Deferred tax assets		
Total deferred tax assets (4-ter)	78,500	214,718
5) From others		
Due within 12 months	2,179,293	1,983,020
Due after 12 months	1,854,406	1,392,495
Total receivables from others (5)	4,033,699	3,375,515
Total receivables (II)	27,085,840	19,860,163
<i>III - Financial assets not constituting fixed assets</i>		
1) Equity investments in subsidiaries	0	4,775,574
4) Other equity investments	8,400	8,400
6) Other securities	0	0
Total financial assets not constituting fixed assets (III)	8,400	4,783,974
<i>IV - Cash and cash equivalents</i>		
1) Bank and postal deposits	18,408,703	5,550,033
3) Cash on hand	2,200	2,144
Total cash and cash equivalents (IV)	18,410,903	5,552,177
<b>Total current assets (C)</b>	<b>45,505,143</b>	<b>30,196,314</b>

#### **D) ACCRUALS AND DEFERRALS**

Accrued income and prepaid expenses	235,783	413,459
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<b>Total accruals and deferrals (D)</b>	<b>235,783</b>	<b>413,459</b>
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<b>TOTAL ASSETS</b>	<b>85,980,840</b>	<b>68,313,817</b>
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## BALANCE SHEET

<b>LIABILITIES</b>	<b>31/12/2019</b>	<b>31/12/2018</b>
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### A) SHAREHOLDERS' EQUITY

I - Capital	400,161	358,590
II - Share premium reserve	42,509,070	35,076,223
III - Revaluation reserves	0	0
IV - Legal reserve	71,718	43,899
V - Statutory reserves	0	0
<i>VII - Other reserves, separately indicated</i>		
Extraordinary or optional reserve	2,005,144	1,190,773
Merger surplus reserve	376,622	376,622
Reserve for unrealised exchange gains	398,956	180,049
Other miscellaneous reserves	140,998	140,999
Total other reserves	2,921,720	1,888,443
VII - Reserve for expected cash flow hedges	(70,275)	(38,596)
IX - Profit (loss) for the year	2,614,341	1,584,789
X - Negative reserve for treasury shares in portfolio	0	(159,187)

<b>Total shareholders' equity</b>	<b>48,446,735</b>	<b>38,754,161</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	144,119	91,799

3) Financial derivative liabilities	70,275	38,596
4) Other provisions	15,000	15,000

<b>Total provisions for risks and charges (B)</b>	<b>233,735</b>	<b>149,736</b>
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<b>C) EMPLOYEE SEVERANCE INDEMNITIES</b>	<b>2,312,384</b>	<b>2,143,307</b>
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#### D) PAYABLES

##### 1) Bonds

Due within 12 months	909,100	0
Due after 12 months	9,090,900	5,000,000
Total bonds (1)	10,000,000	5,000,000

##### 4) Bank debt

Due within 12 months	4,831,142	4,925,611
Due after 12 months	8,439,239	8,124,081
Total bank debt (4)	13,270,381	13,049,692

##### 5) Payables to other lenders

Due within 12 months	128,771	128,245
Due after 12 months	389,489	518,260
Total payables to other lenders (5)	518,260	646,505

##### 6) Advances

Due within 12 months	311,099	234,981
Due after 12 months	341,705	306,512
Total advances (6)	652,804	541,493

##### 7) Payables to suppliers

Due within 12 months	3,907,968	2,015,347
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Total payables to suppliers (7)	3,907,968	2,015,347
9) Payables to subsidiaries		
Due within 12 months	171,143	267,966
Total payables to subsidiaries (9)	171,143	267,966
12) Tax payables		
Due within 12 months	667,917	771,949
Total tax payables (12)	667,917	771,949
13) Due to social security and welfare institutions		
Due within 12 months	443,689	429,217
Total due to social security and welfare institutions (13)	443,689	429,217
14) Other debts		
Due within 12 months	1,681,030	1,494,724
Total other debts (14)	1,681,030	1,494,724

<b>Total payables (D)</b>	<b>31,313,192</b>	<b>24,216,893</b>
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#### **E) ACCRUALS AND DEFERRALS**

Accrued expenses and deferred income	3,674,794	3,049,720
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<b>Total accruals and deferrals (E)</b>	<b>3,674,794</b>	<b>3,049,720</b>
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<b>TOTAL LIABILITIES</b>	<b>85,980,840</b>	<b>68,313,817</b>
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### **INCOME STATEMENT**

	<b>31/12/2019</b>	<b>31/12/2018</b>
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#### **A) VALUE OF PRODUCTION**

1) Revenues from sales and services	20,641,036	18,977,922
3) Changes in work in process on long-term contracts	0	(39,209)

4) Increases in fixed assets for internal work	4,331,302	3,101,046
5) Other revenues and income		
Grants for current expenses	0	2,000
Other revenues and income	1,249,854	1,071,092
Total other revenues and income (5)	1,249,854	1,073,092

<b>Total value of production (A)</b>	<b>26,222,192</b>	<b>23,112,851</b>
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#### **B) COSTS OF PRODUCTION:**

6) For raw, ancillary and consumable materials and goods for resale	806,254	1,293,465
7) For services	9,786,616	6,287,351
8) For use of third-party assets	937,250	570,337
9) For personnel:		
a) Wages and salaries	6,604,757	5,821,002
b) Social security charges	1,971,002	1,740,667
c) Severance pay	490,180	444,780
e) Other costs	4,504	18,167
Total personnel costs (9)	9,070,443	8,024,616
10) Amortisation, depreciation and write-downs:		
a) Amortisation of intangible fixed assets	3,648,843	3,378,010
b) Depreciation of tangible fixed assets	132,854	123,847
d) Write-down of current receivables	0	40,000
Total amortisation, depreciation and write-downs (10)	3,781,697	3,541,857
12) Provisions for risks	0	0
14) Other operating expenses	79,719	123,982

<b>Total costs of production (B)</b>	<b>24,462,175</b>	<b>19,841,608</b>
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<b>Difference between value and costs of production (A-B)</b>	<b>1,760,017</b>	<b>3,271,243</b>
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### **C) FINANCIAL INCOME AND CHARGES**

16) Other financial income:

a) From long-term receivables

From subsidiaries	202,325	192,652
From other companies	15,626	26,584
Total financial income from long-term receivables	217,951	219,236

d) Other income

From subsidiaries	2,221,171	0
Other	4,740	1,132
Total other income (d)	4,740	1,132

Total other financial income (16) 2,225,911 220,368

17) Interest and other financial charges

Other charges	539,374	434,460
Total interest and other financial charges (17)	539,374	434,460

17-bis) Foreign exchange gains and losses (255,110) 413,471

<b>Total financial income and charges (C) (15+16-17+-17-bis)</b>	<b>2,159,598</b>	<b>199,379</b>
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### **D) VALUE ADJUSTMENTS TO FINANCIAL ASSETS AND LIABILITIES**

19) Write-downs

Of equity investments	1,000,000	1,000,000
Total write-downs of equity investments (19)	1,000,000	1,000,000

<b>Total value adjustments (D) (18-19)</b>	<b>(1,000,000)</b>	<b>(1,000,000)</b>
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<b>RESULT BEFORE TAXES (A-B+-C+-D)</b>	<b>2,919,615</b>	<b>2,470,622</b>
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20) Current, deferred and prepaid income taxes for the



year

Current taxes	116,736	180,515
Deferred and prepaid taxes	188,538	705,318

<b>Total current, deferred and prepaid income taxes for the year (20)</b>	<b>305,274</b>	<b>885,833</b>
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<b>21) Profit (loss) for the year</b>	<b>2,614,341</b>	<b>1,584,789</b>
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### **CASH FLOW STATEMENT, INDIRECT METHOD**

Please note that the following items are reclassified in the 2019 financial statements:

- unrealised exchange rate profits/losses;
- write-downs for permanent impairment of financial assets;

- adjustment of derivative instruments;
- receivables from associated companies.

In order to make the figures shown below consistent and comparable, these reclassifications have been extended also to the 2018 financial statements, which have been amended accordingly.

<b>A) CASH FLOWS FROM OPERATING ACTIVITIES (INDIRECT METHOD)</b>	<b>31/12/2019</b>	<b>31/12/2018</b>
Profit (loss for the year)	2,614,341	1,584,789
Income taxes	305,274	885,833
Interest expense (income)	77,074	(184,865)
(Gains)/Losses on disposal of assets	(2,221,011)	(449)
<b>Profit/(Loss) for the year before income taxes, interest, dividends and gains/losses on disposals</b>	<b>775,677</b>	<b>2,285,308</b>
Provisions to funds	542,500	536,579
Amortisation and depreciation of fixed assets	3,781,697	3,501,857
Write-downs for permanent impairment	1,000,000	1,000,000
Value adjustments to asset and liability derivatives not involving cash movements	(31,679)	(17,672)
Other adjustments for non-monetary items	(52,320)	(91,799)
<b>TOTAL ADJUSTMENTS FOR NON-MONETARY ITEMS NOT OFFSET IN THE NET WORKING CAPITAL</b>	<b>5,240,198</b>	<b>4,928,965</b>
<b>CASH FLOW BEFORE CHANGES IN NET WORKING CAPITAL</b>	<b>6,015,876</b>	<b>7,214,273</b>
<b>CHANGES IN NET WORKING CAPITAL</b>		
Decrease/(Increase) in inventory	0	39,209
Decrease/(Increase) in receivables from customers	(3,734,500)	(2,315,661)
Increase/(Decrease) in payables to suppliers	1,918,115	429,861
Decrease/(Increase) in accrued income and prepaid expenses	177,676	71,003
Increase/(Decrease) in accrued expenses and deferred income	625,074	700,331
Other decreases/(Other increases) in net working capital	(3,232,730)	(3,832,231)
<b>Total changes in net working capital</b>	<b>(4,246,365)</b>	<b>(4,907,488)</b>
<b>CASH FLOW AFTER CHANGES IN NET WORKING CAPITAL</b>	<b>1,769,511</b>	<b>2,306,785</b>
<b>OTHER ADJUSTMENTS</b>		
Interest received (paid)	(77,074)	184,865
(Income taxes, paid)	(228,095)	(298,170)
(Use of funds)	(289,425)	(195,407)
<b>TOTAL OTHER ADJUSTMENTS</b>	<b>(594,593)</b>	<b>(308,713)</b>
<b>CASH FLOW FROM OPERATING ACTIVITIES (A)</b>	<b>1,174,918</b>	<b>1,998,072</b>
(Investments in tangible fixed assets)	(131,169)	(76,580)

Divestments in tangible fixed assets		668
(Investments in intangible fixed assets)	(4,715,392)	(3,399,225)
Divestments in intangible fixed assets		0
(Investments in financial fixed assets)	(2,594,503)	(2,624,534)
Divestments in financial fixed assets	101,264	0
(Investments in short-term financial assets)	(101,264)	(192,500)
Divestments in short-term financial assets	6,948,009	0
<b>CASH FLOW FROM INVESTING ACTIVITIES (B)</b>	<b>(493,055)</b>	<b>(6,292,171)</b>
<b>LOAN CAPITAL</b>		
Increase/(Decrease) in payables for bonds	5,000,000	0
Increase/(Decrease) in short-term bank debt	(24,422)	35,327
Loans taken	8,350,000	5,550,400
(Repayment of loans to banks and other lenders)	(8,233,135)	(4,582,554)
<b>Increase/(Decrease) in loan capital</b>	<b>5,092,443</b>	<b>1,003,174</b>
<b>EQUITY</b>		
Capital increase against payment	7,084,420	0
<b>Increase/(Decrease) in equity</b>	<b>7,084,420</b>	<b>0</b>
<b>CASH FLOW FROM FINANCING ACTIVITIES (C)</b>	<b>12,176,863</b>	<b>1,003,174</b>
<b>INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS (A+B+C)</b>	<b>12,858,726</b>	<b>(3,290,925)</b>
Cash and cash equivalents at the beginning of the year	5,552,177	8,843,101
Cash and cash equivalents at year end	18,410,903	5,552,177
<b>INCREASE/(DECREASE) IN CASH AND CASH EQUIVALENTS</b>	<b>12,858,726</b>	<b>(3,290,925)</b>

This statement allows you to evaluate:

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

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

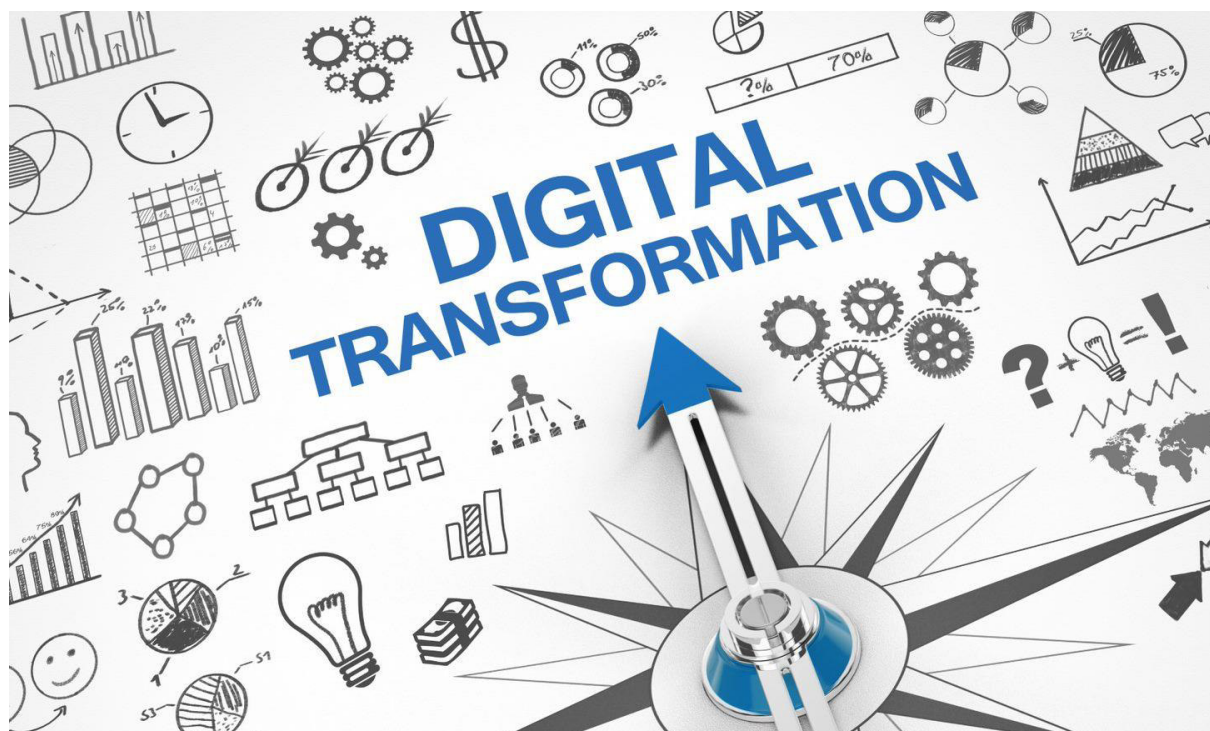
The generation of cash and cash equivalents compared to the previous year, amounting to Euro 12,858,726, is mainly explained by the financing activity, which includes both the contribution of loan capital, amounting to Euro 5,092,443, and equity, amounting to Euro 7,084,420. Operating activities, in turn, generated Euro 1,174,918 as new liquidity, while the

flow from investment activities was negative by Euro 493,055, net of the Euro 6,948,009 contribution generated by the sale of the equity investment in ADmantXS.p.A.

There are no problems with the company'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 Company 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.

# NOTES TO THE ACCOUNTS FOR THE YEAR AS AT 31/12/2019



## Notes to the Accounts, initial part

Dear Shareholders,

these financial statements, submitted for your examination and approval, show a profit of Euro 2,614,341, compared to the previous year's profit of Euro 1,584,789.

## Operations

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.

### **Significant events during the year**

With reference to the significant events that occurred during the year, the following should be noted:

- on 23/04/2019, the Board of Directors decided to partially exercise the proxy granted by the Extraordinary Shareholders' Meeting on 18/04/2019, for a maximum of Euro 10 million, to increase the share capital by issuing new ordinary shares with no nominal value, excluding any pre-emption rights pursuant to Art. 2441, paragraph 5, of the Italian Civil Code. Therefore, the Board approved a divisible share capital increase, excluding any pre-emption rights, for a total limit amount of Euro 7,000,000.20 including the share premium, of which Euro 38,888.89 to be recorded as share capital, by issuing the limit number of 3,888,889 ordinary shares with no nominal value, fully subscribed by ERGO S.r.l., a newly established company owned by a pool of private investors;
- on 03/05/2019, the first share capital increase was carried out, delegated to the Board of Directors, implementing the incentive plan called "Stock Grant Plan 2018 - 2020", which involved the issue of the first tranche of 76,600 new shares pursuant to a free

- capital increase of Euro 766, using the extraordinary reserve of the same amount;
- on 28/06/2019, with the deed drawn up by Notary Rolando Rosa, index no. 124101, collection no. 22757, the third and last share capital increase was carried out, delegated to the Board of Directors, implementing the incentive plan called "Stock Grant Temis Plan 2016-2020". The capital increase involved the issue of the third tranche of 111,151 new shares pursuant to a free capital increase of Euro 1,111.51, using the extraordinary reserve of the same amount; on the same date, implementing the "Stock Grant Temis Plan 2016-2020 ", the company assigned 64.431 treasury shares free of charge to the beneficiaries, corresponding to 25% of the total value of the plan;
- on 20/11/2019, the company sold to the English company Integral AD Science UK Ltd. its entire shareholding (corresponding to 825,093 shares, equal to 60.80% of the share capital) in the subsidiary AdmantX S.p.A., realizing a significant capital gain, as detailed below;
- on 23/12/2019, the first share capital increase was carried out, delegated to the Board of Directors, implementing the incentive plan called "Stock Option Plan 2018 - 2020", which involved the issue of the first tranche of 80,400 new shares pursuant to a capital increase of Euro 804, in the light of the beneficiaries' payment of the Strike Price set out in the Plan.

It should also be noted that in June 2019 Expert System confirmed fulfilment of the conditions for an Innovative SME and its ensuing registration with the special section of the Trento Chamber of Commerce.

As in previous years, in 2019 Expert System strengthened the success of its artificial intelligence solutions, thereby involving customers and partners operating in various sectors, including the following:

- Datlas, a Business Process Outsourcing company, chose Expert System's artificial intelligence to support companies in the accurate, fast and efficient management of documents underlying back-office activities and business processes, increasing automation in information processing. The integration of Cogito technology into the DOME® platform by Datlas is a fundamental step to consolidate the company's Intelligent Process Automation offer, verticalising it into the core processes of the Insurance, Banking, Energy & Telco sectors. This synergy will also further automate

activities such as the extraction of data and information, the execution of checks and controls, as well as the management of workflows in corporate back-offices: by exploiting the ability of Cogito® artificial intelligence to understand the meaning of texts, Datlas will be able to offer its customers faster and more transparent solutions and services;

- Expert System strengthened its success in the application of artificial intelligence to insurance processes by starting a collaboration with AXA XL, which uses Cogito® to enhance its Property Risk Engineering capabilities so as to facilitate the analysis of real estate appraisals. By automating the real estate appraisal reading process through natural language processing, AXA XL's "Risk Consulting" team can expand the range of documents and the volume of reports to be reviewed, focus the time dedicated to risk engineering on high-impact areas, and more effectively mitigate the client-side risk, whilst also allowing insurers to reduce the time spent on making quotes. For AXA XL's risk consultants, this translates into the possibility of extrapolating key information and data from technical appraisals that can be more than 100 pages long in just a few minutes. By automating certain parts of the report analysis process, insurance experts can spend more time understanding clients' needs and providing advice to insurers who, in turn, can offer better solutions and faster quotes to brokers and clients;
- in the insurance field the company also started to collaborate with Swiss Re; using Cogito's advanced natural language understanding features, the customer achieves greater efficiency by automating business processes such as risk assessment or claims analysis; by automatically synthesizing information content from various open sources, and relying on its deep knowledge of the insurance market, Cogito has supported Swiss Re in identifying information that might be cause potential future losses.

In the course of 2019, Expert System was granted several prestigious awards, including the following:

- it came first in the "Insurance Solution Provider" category, proposed by the advisory firm Strategy Meets Action, thanks to Cogito®'s potential for the insurance market. The main objective behind the Transformation in Action Awards is to transform business processes by fostering innovation and increasing efficiency in the InsurTech ecosystem. Every year,

analysts from SMA, an American analysis, research and strategic advisory firm, analyse the solutions that can help insurance companies improve process automation, also on a cognitive basis. Cogito-based advanced Artificial Intelligence solutions are used in different business areas in the insurance world. The ability to extend "intelligent" automation to processes based on the understanding of unstructured, error-prone and time-consuming information provides valuable support to insurers to improve production efficiency, shifting the focus to customer satisfaction and other higher value activities;

- also in 2019, the American magazine KMWorld, a global reference point in Knowledge Management, included the Cogito platform among the "KMWorld Trend Setting Products" of 2019" that increase the potential of knowledge management through radical innovation and continuous evolution. This recognition was the result of the special features of Cogito, which offers its users new updates in knowledge graphs, machine learning and RPA so that organisations can accelerate and simplify the adoption of artificial intelligence in corporate workflows;
- at the same time, Expert System was chosen by the US company Gartner, a worldwide leader in strategic consulting, research and analysis in the field of Information Technology, for the Gartner Magic Quadrant for Insight Engines for the third year in a row, the world's most prestigious award dedicated to solutions for the search and analysis of corporate information, a privilege granted to only 13 companies in the world. It is a recognition that rewards the unique functionality of Cogito® artificial intelligence technology, the deep level of customer satisfaction, the excellent results in terms of accuracy in its diverse business use cases (where it is often part of broader strategic processes, such as claim management in the insurance market), cutting-edge professional services and the commitment to innovation through constant attention to research and development activities;
- Expert System was also mentioned in the Intelligent Insurtech 2019 report in relation to its ability to use Artificial Intelligence for the development of natural language programming, with which texts can be understood in a similar way to human understanding, in a fraction of time. The company was mentioned because of its collaborations with major companies in the insurance industry, aimed at offering customers services such as chatbots, natural language questions and answers, automatic e-mail classification and intelligent search applications. Cogito's technology was

mentioned for its ability to automate various processes such as complaint handling, policy underwriting, audit support, third-party risk management, anti-money laundering and legal compliance procedures.

- as already mentioned, the company maintained its status as an Innovative SME, confirming its considerable propensity to technological innovation in the evolution of its business model.

### Significant events occurred after year end

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 will be enhanced, starting from the US, to become the global benchmark for all business needs related to natural language understanding and processing.

On 5 March 2020, Expert System Helvetia SÀRL was established in Geneva, a wholly-owned subsidiary of Expert System with a fully subscribed and paid-in share capital of CHF 20,000. With this new company, the Group consolidates its position in the artificial intelligence sector, establishing a direct presence in a high potential region for its reference markets. The decision to invest in Switzerland, one of the world's leading financial and insurance centres and also a centre of interest for Pharma and major international organisations, is part of the Group's international expansion and development strategies.

On 19 March 2020, Expert System appointed Gabriele Donino as Group Chief Operating Officer (COO), with the aim of strengthening global operations and increasing synergies between countries. Thanks to his deep experience gained in technology and delivery processes for the insurance market using also artificial intelligence, Gabriele Donino will be

instrumental in enhancing scalability and improving the efficiency of services offered to partners and customers.

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.

The events that occurred after year end have no effect on the financial statements as at 31/12/2019 from an equity, financial and economic point of view.

As already stated in the Management Report, the effects that the global emergency linked to the outbreak of Coronavirus will have on global economic scenarios as from 2020 onwards are yet unknown. To date, it is not known how macroeconomic indicators will evolve once the emergency is over, i.e. whether there will be a rapid recovery to pre-pandemic levels or whether, in a less optimistic view, there will be a slowdown in the global economy or, in the worst case scenario, a recession.

### **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.

## Introduction

The financial statements as at 31/12/2019, of which these Notes to the Accounts are an integral part in accordance with Art. 2423, paragraph 1, of the Italian Civil Code, have been prepared on the assumption that the company will continue operating as a going concern, and match the results of its duly kept accounting records. They have been prepared in compliance with the principle of clarity and with the aim of providing a truthful and accurate account of the company's financial position and results of operations for the year.

As a result of rounding amounts to the Euro unit, the sum of detailed items in certain statements containing detailed values might differ from the total amount.

These Notes are in accordance with the limits imposed by the XBRL taxonomy currently in force.

## General principles for the preparation of financial statements

The following general principles were observed when preparing the financial statements (Art. 2423-bis of the Italian Civil Code):

- items were valued on a prudential and going concern basis;
- items were recognised and presented taking into account the substance of the transaction or contract;
- only the profits made at year-end were indicated;
- income and charges for the year were taken into account, regardless of the date of collection or payment thereof;
- risks and losses pertaining to the year were taken into account even if they became

known after year-end.

It should be noted that:

- in accordance with Art. 2423, paragraph 3, of the Italian Civil Code, if the information required by specific legal provisions is not sufficient to give a truthful and accurate account of the company's situation, additional information deemed necessary to this end is provided;
- in accordance with Art. 2423, paragraph 3-bis, of the Italian Civil Code, recognition, valuation, presentation and disclosure obligations are not complied with when compliance is irrelevant for the purpose of giving a truthful and accurate account.

The structure of the Balance Sheet and Income Statement is as follows.

The Balance Sheet and Income Statement reflect the provisions of articles 2423-ter, 2424 and 2425 of the Italian Civil Code, as amended by Italian Legislative Decree no. 139/2015.

It should also be noted that:

- for each item in the Balance Sheet and Income Statement, the amount of the corresponding item for the previous year is indicated;
- items in the Balance Sheet and Income Statement are recorded in accordance with the principles of arts. 2424-bis and 2425-bis of the Italian Civil Code;
- there are no heterogeneous elements included in individual entries;
- 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, except for:
  - item B.III.1.b "Equity investments in associated companies", which is influenced by a different reclassification of an equity investment and thus reallocated to item B.III.1.d-bis "Equity investments in other companies";
  - item B.III.2.b "Receivables from associated companies", which is influenced by a different reclassification of a receivable and thus reallocated to item B.III.2.d-bis "Receivables from others";
  - item C.II.3.a "Receivables from associated companies", which is influenced by a different reclassification of a receivable and thus reallocated to item C.II.1.a "Receivables from customers";
  - item C.16.a "Other financial income - from long-term receivables from associated



companies", which is influenced by a different reclassification of financial income and thus reallocated to item C.16.a "Other financial income - from long-term receivables from other companies".

In order to make the data of financial statements consistent and comparable, these reclassifications have been extended also to the 2018 financial statements, which have been amended accordingly.

There are no exceptional cases which call for application of the derogations provided for in Art. 2423, paragraphs 4 and 5, and Art. 2423-bis, paragraph 2 of the Civil Code.

### **Consolidated financial statements**

It should be noted that the company, as a parent company, is required to draw up consolidated financial statements since it is listed on the AIM market of Borsa Italiana.

### **Valuation criteria**

The valuation criteria are those specifically provided for in Art. 2426 and other provisions of the Italian Civil Code, as amended by Italian Legislative Decree no. 139/2015, and have not changed from the previous year, taking account of the following specifications on the application of national accounting standards.

As already stated, according to the principle of materiality, recognition, valuation, presentation and disclosure obligations are not complied with when compliance is irrelevant for the purpose of giving a truthful and accurate account. In particular, the criteria identified to implement the principle of materiality are as follows:

- as provided for in OIC 15, the company has enforced the option not to apply the amortised cost standard and the related discounting back (since the effective interest rate is not significantly different from the market interest rate) to the valuation of receivables maturing within 12 months and, for those maturing after 12 months, since the relevant transaction costs, the commissions paid between the parties and any difference between the initial value and the value at maturity are of little significance;
- as provided for in OIC 19, the company has enforced the option not to apply the amortised cost standard and the related discounting back (since the effective interest rate is not significantly different from the market interest rate) to the valuation of payables maturing within 12 months and, for those maturing after 12 months, since the relevant transaction

costs, the commissions paid between the parties and any difference between the initial value and the value at maturity are of little significance.

For the assessment of specific cases not expressly regulated by the above mentioned rules, reference is made to the national accounting standards formulated by the Italian Accounting Body (OIC) and the National Councils of Chartered Accountants and Bookkeepers.

In particular, the valuation criteria adopted when preparing the financial statements were as follows.

## NOTES, ASSETS

### FIXED ASSETS

#### Intangible fixed assets

Valuation criteria and recognition in the Financial Statements (Art. 2427 paragraph 1, point 1, of the Italian Civil Code)

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
7,947,600	6,903,124	1,044,476

They are recorded at historical acquisition cost, net of amortisation during the years, and are allocated directly to individual items.

Start-up and expansion costs and development costs with a long-term useful life are recorded under assets with the consent of the Board of Statutory Auditors. They are amortised over a period not exceeding five years.

Development costs include costs for employees and external technical consultants used for development activities, capitalised for a total of Euro 4,331,302 and amortised over a period of 5 years.

Below is a breakdown of capitalised costs by project:

Type of projects capitalised in 2019	Cost per project
Cogito Answer	19,440
Cogito Discover	450,042
Cogito Intelligence Platform	1,143,319
Core Platform	1,976,379
Cogito Studio	742,122
<b>Grand total</b>	<b>4,331,302</b>

Industrial patent and trademark rights are amortised at an annual 10% rate, while intellectual property rights, specifically software, are amortised over a period of 3/5 financial years.

Leasehold improvements are amortised at rates that depend on the duration of the contract.

## Changes in intangible fixed assets

(Art. 2427, paragraph 1, point 2, of the Italian Civil Code)

	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	Total
Cost	1,321,931	24,647,335	1,056,090	19,052	33,444	38,463	27,116,315
Amortisation (Amortisation fund)	1,023,025	18,439,912	662,426	15,921	33,444	38,463	20,213,190
<b>Net value as at 31/12/2018</b>	<b>298,906</b>	<b>6,207,424</b>	<b>393,664</b>	<b>3,132</b>	-	-	<b>6,903,125</b>
Increases for acquisitions	17,106	4,331,302	366,196	-	-	-	4,714,604
Amortisation for the year	112,913	3,341,258	193,233	651	-	-	3,648,055
Other changes	-	-	(22,072)	-	-	-	(22,072)
<b>Total changes during the year</b>	<b>(95,807)</b>	<b>990,044</b>	<b>150,891</b>	<b>(651)</b>	-	-	<b>1,044,477</b>
Cost	1,339,036	28,978,636	1,400,213	19,052	33,444	-	31,770,381
Amortisation (Amortisation fund)	1,135,937	21,781,169	855,659	16,572	33,444	-	23,822,781
<b>Net value as at 31/12/2019</b>	<b>203,099</b>	<b>7,197,467</b>	<b>544,554</b>	<b>2,480</b>	-	-	<b>7,947,600</b>

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

(Art. 2427, paragraph 1, point 3, of the Italian Civil Code)

Below is a breakdown of start-up and expansion cost items as well as the reasons for their registration. The breakdown of development costs is detailed in the first part of these Notes. It should be noted that, pursuant to and for the purposes of Article 2426, paragraph 1, point 5, of the Italian Civil Code, where start-up and expansion costs and development costs have not been completely amortised, dividends may be distributed only if there are sufficient reserves available to cover the amount of unamortised costs (7,400,566).

## Start-up and expansion costs

Description of costs	Value 31/12/2018	Increase in financial year	Decrease in financial year	Amortisation for the year	Value 31/12/2019
Share capital increase	298,906	17,106	-	112,913	203,099
<b>Totals</b>	<b>298,906</b>	<b>17,106</b>	-	<b>112,913</b>	<b>203,099</b>

Extent and reasons for the reductions in value applied to intangible fixed assets (Art. 2427, paragraph 1, point 3-bis, of the Italian Civil Code)

No intangible assets are written down since it is believed that their amortisation according to a systematic plan is a correct criterion that takes into account their residual possibility of use.

### Tangible fixed assets

Valuation criteria and recognition in the Financial Statements (Art. 2427 paragraph 1, point 1, of the Italian Civil Code)

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
580,337	582,182	(1,845)

They are entered at purchase cost and adjusted by the corresponding depreciation funds.

The value recorded in the financial statements takes into account ancillary charges and costs incurred for the use of the fixed asset, leading to a reduction in the cost of significant commercial discounts and cash discounts.

Depreciation rates, recognised in the income statement, are calculated based on the expected use, function and economic-technical duration of these assets, on the basis of the criterion of their residual possibility of use, a criterion that is considered to be well represented by the following rates, unaltered from the previous year and reduced by half in the year in which the asset comes into operation:

- buildings: 3%
- plants and machinery: 20%
- vehicles: 25%
- furniture and furnishings: 12%
- electronic machines: 10% - 20%

### Land and buildings

Description	Amount	
Historical cost	456,980	
Depreciation of previous years	(105,330)	
<b>Balance as at 31/12/2018</b>	<b>351,650</b>	<b>of which land 87,400</b>
Acquisition during the year	-	
Depreciation for the year	(11,087)	
<b>Balance as at 31/12/2019</b>	<b>340,563</b>	<b>of which land 87,400</b>

### Plants and machinery

Description	Amount
Historical cost	218,291

Depreciation of previous years	(213,297)
<b>Balance as at 31/12/2018</b>	<b>4,994</b>
Acquisition during the year	5,015
Depreciation for the year	(4,055)
<b>Balance as at 31/12/2019</b>	<b>5,954</b>

### Industrial and commercial equipment

Description	Amount
Historical cost	1,558
Depreciation of previous years	(1,558)
<b>Balance as at 31/12/2018</b>	<b>-</b>
Acquisition during the year	-
Depreciation for the year	-
<b>Balance as at 31/12/2019</b>	<b>-</b>

### Other goods

Description	Amount
Historical cost	1,709,963
Depreciation of previous years	(1,484,425)
<b>Balance as at 31/12/2018</b>	<b>225,538</b>
Acquisition during the year	121,806
Decreases during the year	(132)
Depreciation for the year	(117,711)
Other changes during the year	4,320
<b>Balance as at 31/12/2019</b>	<b>233,821</b>

	Land and buildings	Plants and machinery	Industrial and commercial equipment	Other tangible fixed assets	Total tangible fixed assets
Cost	456,981	218,291	1,558	1,708,856	2,385,686
Depreciation (Depreciation fund)	105,330	213,297	1,558	1,483,318	1,803,503
<b>Book value as at 31/12/2018</b>	<b>351,651</b>	<b>4,994</b>	<b>-</b>	<b>225,538</b>	<b>582,182</b>
Increases for acquisitions	-	5,015	-	121,806	126,821
Decreases	-	-	-	132	132
Depreciation for the year	11,087	4,056	-	117,711	132,854
Other changes	-	-	-	4,320	4,320
<b>Total changes</b>	<b>(11,087)</b>	<b>959</b>	<b>-</b>	<b>8,283</b>	<b>(1,845)</b>
Cost	456,981	223,306	1,558	1,829,553	2,511,398
Depreciation (Depreciation fund)	116,417	217,353	1,558	1,595,732	1,931,060
<b>Book value as at 31/12/2019</b>	<b>340,563</b>	<b>5,953</b>	<b>-</b>	<b>233,821</b>	<b>580,338</b>

Pursuant to due application of accounting standard OIC 16 and following a review of the estimates of the useful life of instrumental properties, the portion of cost referring to the plot of land on which they stand has been extracted.

The value attributed to these plots is identified on the basis of a lump-sum estimate that allows for the unit cost to be allocated, making it appear adequate, to the extent of 20% of the cost of the property net of capitalised incremental costs and any revaluations.

Therefore, the depreciation charges relating to the value of the aforesaid land are no longer set aside, regarding them, on the basis of updated corporate estimates, as assets that are not subject to deterioration and have an unlimited useful life.

Pursuant to Laws no. 72 of 19/03/1983, no. 413 of 30/12/1991 and no. 342 of 21/11/2000, no assets currently held by the company have been subject to any monetary or voluntary revaluation.

[Extent and reasons for the reductions in value applied to tangible fixed assets \(Art. 2427, paragraph 1, point 3-bis, of the Italian Civil Code\)](#)

No tangible assets are written down since it is believed that their amortisation according to a systematic plan is a correct criterion that takes into account their residual possibility of use.

### **Financial fixed assets**

[Valuation criteria and recognition in the Financial Statements \(Art. 2427 paragraph 1, point 1, of the Italian Civil Code\)](#)

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
32,711,977	30,218,738	2,493,239

### **Treasury shares**

As said in the introduction to these Notes, during the year, as part of the "Stock Grant Temis 2016-2020" plan, the Company allocated 64.431 treasury shares to the beneficiaries, former employees or directors of Temis S.A., now Expert System France S.A., which was acquired in 2015.

As of today, these types of plans are not regulated by the current OICs, nor is it believed that they can be subject to the IFRS2 accounting model ("Share-based Payment") until the latter is

introduced into our system pursuant to a decision on the matter expressed by national accounting standards (as reported in Assonime's note 101/2017). Therefore, in these financial statements, the said allocation of shares is counterbalanced by the use of the extraordinary reserve for an amount equal to the number of shares allocated, multiplied by the average carrying value, without affecting the income statement and, therefore, the result for 2019, as per approach endorsed by Consob in its Communication no. DEM/2053725 of 30 July 2002. The company has also transferred 12,278 treasury shares to a supplier as payment for services received during the year.

#### Derivative financial instruments

Derivative financial instruments, even where embedded in other financial instruments, are initially recognised when the company acquires the related rights and obligations; they are entered at fair value at both the initial recognition date and at each financial statements date. Changes in derivative financial instruments that hedge the risk of changes in the expected cash flows of another financial instrument or a planned transaction are entered in a shareholders' equity reserve.

Changes in the fair value of the effective component of derivative financial instruments hedging cash flows are entered in the reserve for expected cash flow hedges.

Derivative financial instruments with a negative fair value are recognised in the financial statements under Provisions for risks and charges.

The company has entered into the following derivative contracts with:

##### i) CREDIT AGRICOLE

- Type of derivative contract: Unlisted I.R.S. no. 65611/2017 signed on 25/09/2017 and expiring on 30/01/2023;
- 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 30/01/2023;
- Notional amount at the reference date (31/12/2019): Euro 700,000;

- amount of liability hedged at the reference date (31/12/2019): Euro 700,000.
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 11,916.55;
- fair value when the hedge was created: zero.

j) BANCO BPM

- "Maximum rate with instalment premium" OTC derivative contract ID 790526 F 00104961 D 00038973 signed on 24/07/2017 and expiring on 31/12/2022;
- 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 31/12/2022;
- Notional amount at the reference date (31/12/2019): Euro 266,667;
- amount of liability hedged at the reference date (31/12/2019): Euro 266,667;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 2,359.20;
- fair value when the hedge was created: zero.

k) 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 (31/12/2019): Euro 5,000,000;
- amount of liability hedged at the reference date (31/12/2019): Euro 5,000,000;
- Underlying financial risk: interest rate risk;



- Fair value of the derivative contract: mark-to-model fair value negative by Euro 23,313.32;
- Fair value when the hedge was created: zero.

l) UBI

- Type of derivative contract: Unlisted I.R.S. no. 171206/2018 signed on 24/10/2018 and expiring on 24/10/2021;
- 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 24/10/2021;
- Notional amount at the reference date (31/12/2019): Euro 670,589;
- Amount of liability hedged at the reference date (31/12/2019): Euro 670,589;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 4,059.71;
- Fair value when the hedge was created: zero.

m) CREDIT AGRICOLE

- Type of derivative contract: Unlisted I.R.S. no. 69745/2019 signed on 22/05/2019 and expiring on 22/05/2024;
- 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 22/05/2024;
- Notional amount at the reference date (31/12/2019): Euro 901,986;
- amount of liability hedged at the reference date (31/12/2019): Euro 901,986;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 11,803.66;

- fair value when the hedge was created: zero.

n) INTESA SANPAOLO

- Type of derivative contract: Unlisted I.R.S. no. 31011814 signed on 28/06/2019 and expiring on 15/06/2023;
- 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 15/06/2023;
- Notional amount at the reference date (31/12/2019): Euro 437,500;
- amount of liability hedged at the reference date (31/12/2019): Euro 437,500.
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 1,450.00;
- fair value when the hedge was created: zero.

o) BNL

- Unlisted OTC derivative contract on interest rates signed on 11/07/2019 and expiring on 11/07/2022;
- 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 17/07/2022;
- Notional amount at the reference date (31/12/2019): Euro 1,375,000;
- Amount of liability hedged at the reference date (31/12/2019): Euro 1,375,000;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value positive by Euro 646.07;
- Fair value when the hedge was created: zero.

p) BPER BANK

- “Interest Rate Option Cap Premium Running” unlisted OTC derivative contract on interest rates signed on 01/07/2019 and expiring on 24/06/2022;
- 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 24/06/2022;
- Notional amount at the reference date (31/12/2019): Euro 2,632,824;
- Amount of liability hedged at the reference date (31/12/2019): Euro 2,632,824;
- Underlying financial risk: interest rate risk;
- Fair value of the derivative contract: mark-to-model fair value negative by Euro 11,181.18;
- Fair value when the hedge was created: zero.

Simple hedging transactions are valued according to the simplified method since the conditions required by OIC 32 are met.

### Equity investments

Equity investments in subsidiaries and associated companies, entered under financial fixed assets, are valued at purchase or subscription cost.

Other equity investments are stated at purchase or subscription cost.

Equity investments entered under fixed assets represent a long-lasting and strategic investment by the company.

With regard to equity investments in subsidiaries, a Euro 1 million write-down is deemed necessary, in addition to the provision already existing as at 01/01/2019 and also amounting to Euro 1,000,000, as further explained below.

### Changes in equity investments, other securities, fixed financial derivative assets (Art. 2427, paragraph 1, point 2, of the Italian Civil Code)

	Equity investments in subsidiaries	Equity investments in associated companies	Equity investments in other companies	Total equity investments
Cost	16,043,407	251,266	57,005	16,351,678

<b>Book value as at 31/12/2018</b>	<b>16,043,407</b>	<b>251,266</b>	<b>57,005</b>	<b>16,351,678</b>
Change in the year	800,000	(251,266)	251,266	800,000
<b>Total changes</b>	<b>800,000</b>	<b>(251,266)</b>	<b>251,266</b>	<b>800,000</b>
Cost	16,843,407	-	308,271	17,151,678
<b>Book value as at 31/12/2019</b>	<b>16,843,407</b>	<b>-</b>	<b>308,271</b>	<b>17,151,678</b>

With regard to changes in equity investments in subsidiaries, the Euro 800,000 change is due to:

- the subscription by Expert System S.p.A. of a Euro 300,000 increase in the capital of subsidiary Expert System France S.A., by waiving the financial receivables due from the subsidiary;
- the similar subscription of a Euro 1,500,000 increase in the capital of subsidiary Expert System Iberia S.L.U., by waiving the financial receivables due from the subsidiary;
- the Euro 700,000 write-down of the book value of Expert System France S.A., detailed below in these Notes;
- the Euro 300,000 write-down of the book value of Expert System Iberia S.L.U., detailed below in these Notes.

As already specified in the introduction to this document, item B.III.1.b "Equity investments in associated companies" is influenced by a different reclassification of an equity investment and is thus reallocated to item B.III.1.d-bis "Equity investments in other companies"; this reclassification, in compliance with the principle of comparability, has been extended also to the 2018 financial statements.

With reference to information on financial fixed assets pursuant to Art. 2427-bis, paragraph 1, point 2, of the Italian Civil Code, the financial statements do not include financial fixed assets at a value higher than their fair value.

## Changes in financial fixed assets (Art. 2427 paragraph 1, point 2 of the Italian Civil Code)

### Receivables

Description	Within 12 months	After	After	Total	Of which relating to transactions including a repurchase obligation	Fair value
		12 months	5 years			
Subsidiaries	710,894	13,272,224	-	13,983,118		
Associated companies	0	0	-	0	-	-
Other companies	427,181	150,000	-	577,181	-	-

Book value as at 31/12/2019	1,138,075	13,422,224	-	14,560,299		
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As already specified when discussing equity investments, item B.III.2.b "Receivables from associated companies" is influenced by a different reclassification of an equity investment and is thus reallocated to item B.III.2.d-bis "Receivables from others"; this reclassification, in compliance with the principle of comparability, has been extended also to the 2018 financial statements.

With reference to these sums, it should be noted that they have been disbursed pursuant to an interest-bearing intercompany loan plan, which provides for the disbursement by Expert System S.p.A. to its subsidiaries, from time to time, of loans for a total amount such as to allow these subsidiaries to raise the necessary financial resources to meet their respective spending and investment commitments. This plan, approved by the Board of Directors of Expert System S.p.A. on 07/02/2019, is valid until 07/02/2020.

The changes during the year are as follows:

	Value at the beginning of the year	Changes during the year	Year-end value	Amount due within the financial year	Amount due after the financial year
Long-term receivables from subsidiaries	13,155,505	827,613	13,983,118	710,894	13,272,224
Long-term receivables from others	711,555	(134,374)	577,181	427,181	150,000
<b>Total long-term receivables</b>	<b>13,867,060</b>	<b>693,239</b>	<b>14,560,299</b>	<b>1,138,075</b>	<b>13,422,224</b>

Long-term receivables from subsidiaries, totalling Euro 13,983,118, in accordance with the Board of Directors' resolution of 07/02/2019 concerning intercompany loans, are subject to an interest rate "agreed or that would have been agreed for a similar loan taken out by independent companies", referring to the market in which Expert System operates, since "it is the lender's market that must be considered "relevant"" (see Ministerial Circular no. 32/1980, Chapter IV).

The change in long-term receivables from subsidiaries, amounting to Euro 827,613, is due to additional loans to subsidiaries for Euro 2,627,613, net of the Euro 1,800,000 waiver described above.

[Details on equity investments in subsidiaries owned directly or through a trust company or a third party \(Art. 2427 paragraph 1, point 5 of the Italian Civil Code\)](#)

In compliance with the provisions of Art. 2427, paragraph 1, point 5, of the Italian Civil Code, please find below the details of the book value and any changes in the value of equity investments in subsidiaries, based on the situation at the date of the latest approved financial statements.

#### Details on equity investments in subsidiaries

Details on long-term investments in subsidiaries:

Company name	Town, if in Italy, or foreign country	Capital in Euro	Share held (%)	Book value or corresponding receivable	Shareholders' Equity as at 31/12/2019	Profit (Loss) 2019	Fair Value
Expert System France S.A.	Paris, France	199,269	100%	14,494,815	1,717,116	393,170	-
Expert System Cogito Ltd.	London, UK	1,175	100%	1,248	(1,218,147)	(168,774)	-
Expert System Iberia S.L.U.	Barcelona, Spain	2,603,000	100%	2,347,344	(1,632,117)	(1,248,107)	-
Expert System USA Inc.	Delaware, USA	1	100%	1	(4,480,396)	161,921	-
<b>Total</b>				<b>16,843,408</b>			

The subsidiary Expert System France S.A., in turn, holds the following equity investments, indirectly controlled by Expert System S.p.A.:

Company	Town, if in Italy, or foreign country	Capital in Euro	Shareholders' Equity (excluding profit/loss for the year)	Profit (Loss) 2019	Share held (%)
Expert System Enterprise Corp.	Rockville, USA	178	(4,225,909)	(1,203,229)	100.00%
Expert System Canada - Semantic Technologies Inc.	Montreal, Canada	685	(104,118)	(20,856)	100.00%
Expert System Deutschland GMBH	Heidelberg, Germany	25,000	(960,241)	(79,876)	100.00%

Following the impairment test on its subsidiaries, the company prudently decided to write down the book value of Expert System France S.A. by Euro 700,000 and of Expert System Iberia S.L.U. by Euro 300,000, in addition to the Euro 1,000,000 write-down provision already in place on 01/01/2019.

Details on equity investments in associated companies owned directly or through a trust company or a third party (Art. 2427 paragraph 1, point 5 of the Italian Civil Code)

In compliance with the provisions of Art. 2427, paragraph 1, point 5 of the Italian Civil Code, it should be noted that the equity investment in the company CY4Gate S.r.l., being equal to 17.66% of its share capital, is reclassified among other equity investments (for the sake of comparability, the 2018 financial statements have also been amended, as specified in the introduction to this document). For this reason the information required by the article of the Italian Civil Code in question is not provided.

Breakdown of long-term receivables by geographical area (Art. 2427, paragraph 1, point 6, of the Italian Civil Code)

In relation to the provisions of the last part of Art. 2427 paragraph 1, point 6, of the Italian Civil Code, with reference to the breakdown of receivables by geographical area, please note what follows.

Geographical area	Long-term receivables from subsidiaries	Long-term receivables from others	Total long-term receivables
Italy	-	577,181	577,181
EEC	5,964,861	-	5,964,861
Extra-EEC	8,018,257	-	8,018,257
<b>Total</b>	<b>13,983,118</b>	<b>577,181</b>	<b>14,560,299</b>

Analysis of the value of financial fixed assets

	Book value
Receivables from subsidiaries	13,983,118
Receivables from others	577,181

Details of the value of long-term receivables from subsidiaries:

Description	Book value
Financial receivables from Expert System USA Inc.	5,609,625
Financial receivables from Expert System Cogito Ltd.	739,866
Financial receivables from Expert System Iberia S.L.U.	2,856,976
Financial receivables from Expert System Enterprise Corp.	2,408,632
Financial receivables from Expert System France S.A.	1,424,023
Financial receivables from Expert System Deutschland GMBH	943,996
<b>Total</b>	<b>13,983,118</b>

#### Details of the value of long-term investments in other companies:

Description	Book value
CY4Gate S.r.l.	251,266
Okkam S.r.l.	1,000
Conai	5
Confidimpresa	5,000
Distretto Tecnologico Trentino S.c.a.r.l.	1,000
Buzzoole Holdings Limited	50,000
<b>Total</b>	<b>308,271</b>

## CURRENT ASSETS

### Current assets: receivables

#### Receivables

Valuation criteria and recognition in the Financial Statements (Art. 2427 paragraph 1, point 1, of the Italian Civil Code)

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 for receivables 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, receivables are shown at their estimated realisable value.

The nominal value of receivables is adjusted to their estimated realisable value using a specific bad debt provision, taking into account any indicators of permanent loss. Receivables originally due within one year and subsequently converted into long-term receivables are shown in the balance sheet under financial fixed assets.

#### Receivables

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
27,085,840	19,860,163	7,225,677



A significant amount of receivables as at 31/12/2019, equal to Euro 4,742,665, is expressed in foreign currency. The conversion criteria for values expressed in foreign currency are shown in these Notes.

Analysis of changes and maturity of receivables included in current assets (Art. 2427, paragraph 1, point 4, of the Italian Civil Code)

	Value at the beginning of the year	Changes during the year	Year-end value	Amount due within the financial year	Amount due after the financial year
Receivables from customers included in current assets	9,766,201	3,884,499	13,650,700	13,650,700	
Receivables from subsidiaries included in current assets	6,100,502	2,690,127	8,790,629	8,790,629	
Tax receivables included in current assets	403,227	129,085	532,312	532,312	
Deferred tax assets included in current assets	214,718	(136,218)	78,500	70,042	8,458
Receivables from others included in current assets	3,375,515	658,184	4,033,699	2,179,293	1,854,406
<b>Total receivables included in current assets</b>	<b>19,860,163</b>	<b>7,225,677</b>	<b>27,085,840</b>	<b>25,222,976</b>	<b>1,862,864</b>

#### Changes in receivables included in current assets

Receivables of a significant amount as at 31/12/2019 include:

Receivables from subsidiaries of a significant amount as at 31/12/2019:

Description	Within 12 months	After 12 months
Receivables from Expert System USA Inc.	959,809	-
Receivables from Expert System Cogito Ltd.	889,832	-
Receivables from Expert System France S.A.	1,457,829	-
Receivables from Expert System Iberia S.L.U.	1,540,389	-
Receivables from Expert System Enterprise Corp.	3,714,870	-
Receivables from Expert System Deutschland GMBH	206,172	-
Receivables from Expert System Canada - Semantic Technologies Inc.	21,727	-
<b>Total</b>	<b>8,790,629</b>	<b>-</b>

Tax receivables as at 31/12/2019, amounting to Euro 532,312 include:

Description	Within 12 months	After 12 months
Bonus receivable under Decree Law 66/14	7,844	-
Non-taxable R&D tax receivables under Decree Law 70/2011	2,311	-
Non-taxable R&D tax receivables under Ministerial Law no. 17 of 27 May 2015	258,908	-
IRES [Corporate Income Tax] receivable	33,432	-
IRAP [Regional Tax on Production] receivable	63,779	-

VAT receivable	166,038	-
<b>Total</b>	<b>532,312</b>	<b>-</b>

With reference to R&D tax receivables, it should be noted that these amounts are entered in the financial statements since Expert System S.p.A. benefits from the allowance granted to companies investing in research and development as per Ministerial Decree no. 17 of 27 May 2015.

Deferred tax assets as at 31/12/2019, amounting to Euro 78,500, are broken down by maturity as follows:

Description	Within 12 months	After 12 months	Total
Deferred tax assets	70,042	8,458	78,500
<b>Total</b>	<b>70,042</b>	<b>8,458</b>	<b>78,500</b>

Deferred tax assets of Euro 78,500 include Euro 70,042 as prepaid taxes arising from tax losses carried forward of previous years of Euro 291,843 (Euro 859,420 as at 01/01/2019 used during the year for Euro 567,577), since the conditions required by accounting standards for the recognition of the future tax benefit are met, in particular the reasonable certainty that the company will achieve taxable income in the future such as to absorb these losses.

Receivables from others as at 31/12/2019, equal to Euro 4,033,699, include:

Description	Within 12 months	After 12 months
Receivables from Okkam	86,540	-
Receivables from personnel	7,950	-
Security deposits in cash	2,069	43,248
Receivables for suspended costs	270,349	-
Sundry receivables	14,607	-
Suppliers for credit notes to receive	1,282	-
Advances to suppliers	72,526	-
Receivables for grants for research projects	1,723,970	1,811,158
<b>Total</b>	<b>2,179,293</b>	<b>1,854,406</b>

Receivables for grants for research projects within and after 12 months refer to all receivables accrued as at 31/12/2019 relating to sums to be collected by the company for this purpose.

Below are details of the receivables for grants for research projects:

Type of call for proposals	Within 12 months	After 12 months
Horizon 2020	-	426,125
Horizon 2020 - EIT Digital	579,769	-

PON	-	115,000
PON R&C 2007-2013	619,696	-
POR Fesr Apiae	-	257,285
POR Fesr Lazio	217,317	-
European Project - ISEC Call for proposals	-	178,478
MISE [Italian Ministry of Economic Development]	307,189	252,966
MIUR [Italian Education, University and Research Ministry]	-	581,303
<b>Total</b>	<b>1,723,970</b>	<b>1,811,158</b>

### Breakdown of receivables included in current assets by geographical area (Art. 2427, paragraph 1, point 6, of the Italian Civil Code)

In relation to the provisions of the last part of Art. 2427 paragraph 1, point 6, of the Italian Civil Code, with reference to the breakdown of receivables by geographical area, please note what follows.

### Details on receivables included in current assets by geographical area

Geographical area	Italy	EEC Customers	Extra-EEC Customers	Customers for invoices to be issued Extra-EEC	Customers for invoices to be issued EEC	Customers for invoices to be issued ITALY	(Bad debt provision)	Total
Receivables from customers included in current assets	6,354,048	230,985	1,705,506	101,168	110,250	5,338,924	(190,180)	13,650,700
Receivables from subsidiaries included in current assets	-	4,094,222	4,696,407	-	-	-	-	8,790,629
Tax receivables included in current assets	532,312	-	-	-	-	-	-	532,312
Deferred tax assets included in current assets	78,500	-	-	-	-	-	-	78,500
Receivables from others included in current assets	3,904,002	114,572	13,454	-	-	1,670	-	4,033,699
<b>Total receivables included in current assets</b>	<b>10,868,862</b>	<b>4,439,779</b>	<b>6,415,367</b>	<b>101,168</b>	<b>110,250</b>	<b>5,340,594</b>	<b>(190,180)</b>	<b>27,085,840</b>

The nominal value of receivables is adjusted by using a specific bad debt provision which underwent the following changes during the year:

Description	Bad debt provision pursuant to Art. 2426 of the Italian Civil Code	Bad debt provision pursuant to Art. 106 of Presidential Decree 917/1986	Total
Balance as at 31/12/2018	108,779	81,401	190,180
Use during the year	-	-	-

Provision for the year	-	-	-
<b>Balance as at 31/12/2019</b>	<b>108,779</b>	<b>81,401</b>	<b>190,180</b>

### Financial assets not constituting fixed assets

Valuation criteria and recognition in the Financial Statements (Art. 2427 paragraph 1, point 1, of the Italian Civil Code)

Securities included in current assets, if any, are valued at the lower of purchase cost and realisable value based on market trends.

The market to which reference is made to compare the cost is the Milan Stock Exchange. For unlisted securities, if any, reference is made to prices of similar securities (at nominal value adjusted according to the market rate of return).

### Financial assets not constituting fixed assets

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
8,400	4,783,974	(4,775,574)

### Analysis of changes in financial assets not constituting fixed assets (table)

	Value at the beginning	Change during the	Year-end value
Equity investments not held as fixed assets	4,775,574	(4,775,574)	-
Other equity investments not held as fixed assets	8,400	-	8,400
Other securities not held as fixed assets	-	-	-
<b>Total financial assets not constituting fixed assets</b>	<b>4,783,974</b>	<b>(4,775,574)</b>	<b>8,400</b>

The change in the item "Equity investments not held as fixed assets in subsidiaries", amounting to Euro 4,775,574, is due to the sale of the equity investment in the subsidiary AdmantX S.p.A., which took place on 20/11/2019; the equity investment was bought by the English company Integral AD Science UK Ltd. with registered office in London, 16 New Burlington Place.

Expert System S.p.A. realised a capital gain of Euro 2,221,171 recorded in item C.16.d of the income statement.

### Cash and cash equivalents

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
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18,410,903	5,552,177	12,858,726
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Analysis of changes in cash and cash equivalents (Art. 2427, paragraph 1, point 4, of the Italian Civil Code)

	Value at the beginning	Change during the year	Year-end value
Bank and postal deposits	5,550,033	12,858,670	18,408,703
Cash on hand	2,144	56	2,200
<b>Total cash and cash</b>	<b>5,552,177</b>	<b>12,858,726</b>	<b>18,410,903</b>

Valuation criteria and recognition in the Financial Statements (Art. 2427 paragraph 1, point 1, of the Italian Civil Code)

Cash and cash equivalents, represented by cash on hand and bank deposits, are stated at their nominal value.

The balance represents cash and cash equivalents and the existence of cash on hand at the end of the year.

Receivables with a residual duration of more than five years (Art. 2427, paragraph 1, point 6, of the Italian Civil Code)

There are no receivables included in current assets with a residual duration of more than five years.

Receivables subject to a repurchase agreement (Art. 2427 paragraph 1, point 6-ter of the Italian Civil Code)

At the end of the financial year, there were no transactions entered among long-term receivables and receivables included in current assets that imposed any repurchase obligation on the buyer.

## **D) ACCRUALS AND DEFERRALS**

Valuation criteria and recognition in the Financial Statements (Art. 2427 paragraph 1, point 1, of the Italian Civil Code)

They 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 refer to income and charges whose accrual is anticipated or postponed with respect to their numerical and/or documentary manifestation; they are posted regardless of the date of payment or collection of the corresponding income and charges, involving two or more financial years and spread over time.

Also for these items, the criteria adopted in the valuation and conversion of foreign currency entries are reported in the first part of these notes.

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
235,783	413,459	(176,676)

#### Analysis of changes in accrued income and prepaid expenses (Art. 2427, paragraph 1, point 4, of the Italian Civil Code)

	Value at the beginning	Change during the year	Year-end value
Accrued income	-	-	-
Prepaid expenses	413,459	(176,676)	235,783
<b>Total accrued income and</b>	<b>413,459</b>	<b>(176,676)</b>	<b>235,783</b>

The item is broken down as follows (Art. 2427, paragraph 1, point 7, of the Italian Civil Code).

Prepaid expenses	Within 12 months	After 12 months	After 5 years
Rental and lease liabilities	10,146	-	-
Other prepaid expenses	5,667	2,173	245
Insurance	1,660	-	-
Commissions	57,543	74,090	6,002
Consulting services	16,238	24,026	3,191
Maintenance	1,846	123	-
Rentals	21,962	-	-
Personnel recruitment and training	1,750	-	-
Miscellaneous services	277	457	127
Software	3,696	4,564	-
<b>Grand total</b>	<b>120,785</b>	<b>105,434</b>	<b>9,564</b>

#### Capitalised financial charges (Art. 2427, paragraph 1, point 8, of the Italian Civil Code)

The company has not capitalised financial charges at the values recorded on the assets side of the balance sheet.

## NOTES TO THE ACCOUNTS, LIABILITIES AND SHAREHOLDERS' EQUITY

### SHAREHOLDERS' EQUITY

In accordance with Art. 2427 paragraph 1, points 4 and 7-bis, of the Italian Civil Code, please find below our comments on the main items making up Shareholders' Equity and the corresponding changes.

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
48,446,735	38,754,161	9,692,574

### Changes in Shareholders' Equity

	Value at the beginning of the year	Allocation of previous year's result	Other changes			Result for the year	Year-end value
		Other allocations	Increases	Decreases	Reclassifications		
Capital	358,590		41,571				400,161
Share premium reserve	35,076,223		7,432,847				42,509,070
Legal reserve	43,899	27,819					71,718
Other reserves							
Extraordinary reserve	1,190,773	1,338,063		-523,692			2,005,144
Merger surplus reserve	376,622						376,622
Reserve for unrealised exchange gains	180,049	218,907					398,956
Other miscellaneous reserves	140,999			-1			140,998
Total other reserves	1,888,443	1,556,970	0	-523,693	0	0	2,921,720
Reserve for expected cash flow hedges	-38,596			-31,679			-70,275
Profit (loss) for the year	1,584,789		2,029,552			2,614,341	2,614,341
Negative reserve for treasury shares in portfolio	-159,187			159,187			-
<b>Total Shareholders' equity</b>	<b>38,754,161</b>		<b>7,474,418</b>	<b>-396,185</b>	<b>0</b>	<b>2614.341</b>	<b>48,446,735</b>

### Details of miscellaneous other reserves

Description	Amount
PIA [Integrated Package of Allowances] Reserve Fund	141,000
Reserve for rounding Euro units	(2)
<b>Total</b>	<b>140,998</b>

Availability and use of shareholders' equity (Art. 2427 first paragraph, point 7-bis, of the Italian Civil Code)

Shareholders' equity items are broken down as follows according to their origin, possibility of use, distributability and use in the previous three years.

#### Origin, possibility of use and distributability of equity items

	Amount	Origin/ nature	Possibility of use	Available portion*	Summary of uses in the previous three years - to cover losses
Capital	400,161		B	-	-
Share premium reserve	42,509,070	Capital reserve	A, B, C**	42,509,070	1,071,519
Legal reserve	71,718	Profit reserve	B***	-	-
<i>Other reserves</i>					
Extraordinary reserve	2,005,144		A, B, C	2,005,144	1,207,777
Merger surplus reserve	376,622	Profit reserve	A, B, C	376,622	-
Reserve for unrealised exchange gains	398,956	Profit reserve	A, B, C****	-	-
Other miscellaneous reserves	140,998			-	-
<b>Total other reserves</b>					<b>2,279,296</b>
Reserve for expected cash flow hedges	(70,275)	Reserve for derivative financial instruments		-	-
Negative reserve for treasury shares in portfolio	0	Profit reserves		0	-
<b>Total</b>				<b>44,890,836</b>	<b>2,279,296</b>
<i>Non-distributable portion</i>				7,400,566	
<i>Residual distributable portion</i>				37,490,270	

Key: A: for capital increase; B: to cover losses; C: for distribution to shareholders; D: for other By-law restrictions; E: other

\* net of any reserve for treasury shares in portfolio and losses carried forward

\*\* pursuant to Art. 2431 of the Italian Civil Code: usable to cover losses and for capital increase. Not usable for distribution to shareholders until the legal reserve has reached 1/5 of the share capital

\*\*\* pursuant to Art. 2430 of the Italian Civil Code: only when the legal reserve has reached 1/5 of the share capital, does the surplus actually become available

\*\*\*\* it cannot be distributed until the net profit is realised

Please note that none of the reserves shown in the table above is taxed, if distributed.

#### Origin, possibility of use and distributability of miscellaneous other reserves

Description	Amount	Origin/ nature	Possibility of use	Available portion
PIA [Integrated Package of Allowances] Reserve Fund	141,000	Profit reserve	A, B, C	-
Reserve for rounding Euro units	(2)			
<b>Total</b>	<b>140,998</b>			

Key: A: for capital increase; B: to cover losses; C: for distribution to shareholders; D: for other By-law restrictions; E: other

This is a reserve allocated by resolution of the Shareholders' Meeting of 15 July 2008, referring to the funded research project called "Teliar" which makes use of Financial Allowances



pursuant to measure 2.1.a Integrated Package of Allowances - PIA [from the Italian word *Pacchetto Integrato di Agevolazioni*] Innovation - provided for by the P.O.N. [National Operational Programme] “Sviluppo Imprenditoriale Locale” [Local Entrepreneurial Development] (2nd Call for Proposals) Project Application A02/1276/P - 44415/13 Provisional concession decree no. 150160 of 20/03/2006. This reserve is subject to completion of the project specified above and is thus not available.

#### Information on the reserve for expected cash flow hedges

The changes in the reserve for expected cash flow hedges are as follows (Art. 2427 bis, paragraph 1, point 1 b) quater, of the Italian Civil Code).

#### Analysis of changes in the reserve for expected cash flow hedges (table)

	Reserve for expected cash flow hedges
Value at the beginning of the year	(38,596)
Changes during the year	(31,679)
Increase due to change in fair value	-
<b>Year-end value</b>	<b>(70,275)</b>

The change in the value of the reserve expresses the adjustment to the Fair Value of the derivative instrument.

As required by Art. 2427, paragraph 1, point 4 of the Italian Civil Code, please find below details on the formation and use of shareholders' equity items:

	Share capital	Legal reserve	Reserves	Result for the year	Total
<b>At the beginning of the previous year</b>	<b>357,207</b>	<b>43,899</b>	<b>37,857,458</b>	<b>(1,071,519)</b>	<b>37,187,045</b>
Allocation of the result for the year				1,071,519	1,071,519
Other changes					0
- Increases for capital increases	1,383		(1,383)		0
- Adjustment of the reserve for expected cash flow hedges			(17,672)		(17,672)
- Other decreases			(1,071,520)		(1,071,520)
Result for the current year				1,584,789	1,584,789
<b>At the end of the previous year</b>	<b>358,590</b>	<b>43,899</b>	<b>36,766,883</b>	<b>1,584,789</b>	<b>38,754,161</b>
Allocation of the result for the year		27,819		(1,584,789)	(1,556,970)
Share premium reserve			7,432,847		7,432,847
Other changes					0
- Increases for capital increases	41,571		(1,878)		39,693
- Extraordinary reserve (Increases)			1,338,063		1,338,063
- Extraordinary reserve (Decreases)			(521,815)		(521,815)

- Reserve for unrealised exchange gains			218,907		218,907
- Adjustment of the reserve for expected cash flow hedges			(31,679)		(31,679)
- Negative reserve for treasury shares in portfolio			159,187		159,187
Result for the current year				2,614,341	2,614,341
<b>At the end of the current financial year</b>	<b>400,161</b>	<b>71,718</b>	<b>45,360,515</b>	<b>2,614,341</b>	<b>48,446,735</b>

The balance of "Reserves" as at 31/12/2019 expresses the net value of the following reserves:

Share premium reserve	42,509,070
Extraordinary reserve	2,005,144
Merger surplus reserve	376,622
Reserve for unrealised exchange gains	398,956
Other reserves	140,998
Reserve for expected cash flow hedges	(70,275)
<b>Totals</b>	<b>45,360,515</b>

In accordance with accounting standard no. 28 on Shareholders' equity, the following additional information is provided.

Shareholders' equity does not include reserves or other funds which, in the event of distribution, contribute to the company's taxable income, regardless of the period of formation.

Reserves or other funds which, in the event of distribution, do not form part of shareholders' taxable income, regardless of the period of formation.

Reserves	Value
Share premium reserve	42,509,070
	<b>42,509,070</b>

#### Reserves incorporated in the share capital

There are no such reserves.

#### Negative reserve for purchase of treasury shares

Changes in treasury shares are as follows:

Description	31/12/2018	Increases	Decreases	31/12/2019
Expert System S.p.A.	159,187	-	(159,187)	-

In compliance with the law, the percentage is within the limit set by articles 2357 and 2357 bis of the Italian Civil Code.

## B) PROVISIONS FOR RISKS AND CHARGES

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.

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
233,735	149,736	83,999

	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	91,799	38,596	15,000	149,736
Changes during the year					
Provision for the year	-	52,320	31,679		83,999
Use during the year	-		-	-	-
Other changes	-	-	-		-
<i>Total changes</i>	-	52,320	31,679	-	83,999
<b>Year-end value</b>	<b>4,341</b>	<b>144,119</b>	<b>70,275</b>	<b>15,000</b>	<b>233,735</b>

Any increases relate to provisions for the year. Any decreases relate to uses during the year.

The item "Other provisions", equal to Euro 15,000 as at 31/12/2019, refers to a provision for legal risks.

## C) EMPLOYEE SEVERANCE INDEMNITIES

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.

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
2,312,384	2,143,307	169,077

Analysis of changes in employee severance indemnities (Art. 2427, paragraph 1, point 4, of the Italian Civil Code)

	Employee severance indemnities
Value at the beginning of the year	2,143,307
<i>Changes during the year</i>	
Provision for the year	490,180
Use during the year	229,082
Other changes	(92,021)
<i>Total changes</i>	<i>169,077</i>
<b>Year-end value</b>	<b>2,312,384</b>

The provision set aside represents the company's actual debt as at 31/12/2019 toward its employees still working at that date, net of advances paid.

## D) PAYABLES

Valuation criteria and recognition in the Financial Statements (Art. 2427 paragraph 1, point 1, of the Italian Civil Code)

The company has enforced the option:

- not to discount payables since the effective interest rate is not significantly different from the market interest rate;
- not to apply the amortised cost standard for payables maturing within 12 months;
- 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.

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
31,313,192	24,216,893	7,096,299

In accordance with the last part of Art. 2427, paragraph 1, point 6, of the Italian Civil Code, payables existing as at 31/12/2019 are broken down by geographical area in the following table.

**Analysis of changes and maturity of payables (Art. 2427, paragraph 1, point 4 and point 6 of the Italian Civil Code)**

	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
						amount due after 5 years
Bonds	5,000,000	5,000,000	10,000,000	909,100	9,090,900	1,750,000
Bank debt	13,049,692	220,689	13,270,381	4,831,142	8,439,239	107,089
Payables to other lenders	646,505	(128,245)	518,260	128,771	389,489	-
Advances	541,493	111,311	652,804	311,099	341,705	-
Payables to suppliers	2,015,347	1,892,621	3,907,968	3,907,968	-	-
Payables to subsidiaries	267,967	(96,824)	171,143	171,143	-	-
Tax payables	771,949	(104,032)	667,917	667,917	-	-
Due to social security and welfare institutions	429,217	14,472	443,689	443,689	-	-
Other debts	1,494,723	186,307	1,681,030	1,681,030	-	-
<b>Total payables</b>	<b>24,216,893</b>	<b>7,096,299</b>	<b>31,313,192</b>	<b>13,051,859</b>	<b>18,261,333</b>	<b>1,857,089</b>

The most significant payables as at 31/12/2019 are examined below.

The bank debt balance as at 31/12/2019, amounting to Euro 13,270,381 and including loans payable, expresses the actual debt for principal, interest and ancillary charges accrued and payable. Below is the corresponding list:

Description	Within 12 months	After 12 months	After 5 years
Advances on receivables	478	-	-
Current account overdrafts	24,557	-	-
Charges payable	20,161	-	-
Banco Desio - Financing	252,494	-	-
BNL - Loan	500,000	875,000	-
Bper - Financing	740,992	1,891,832	-
BPM - Financing	141,745	107,241	-
BPM - Financing	88,889	177,778	-

Credit Agricole - Financing	200,000	500,000	-
Credit Agricole - Financing	196,900	705,068	-
Intesa Sanpaolo - Mediocredito	400,000	500,000	-
Intesa Sanpaolo	125,000	312,500	-
Credem - Financing	77,068	-	-
Emilbanca - Financing	357,215	916,928	-
MPS - Loan	200,000	100,000	-
MPS - Loan	191,667	958,333	-
CARIGE Bank loan	153,688	-	-
CARIGE Bank loan	23,061	204,801	107,089
San Felice 1893 Banca Popolare - Financing	232,832	852,483	-
UBI - Financing	171,084	-	-
UBI - Financing	333,314	337,275	-
Unicredit - Financing	400,000	-	-
<b>Total payables</b>	<b>4,831,142</b>	<b>8,439,239</b>	<b>107,089</b>

#### Payables to other lenders as at 31/12/2019

Description	Within 12 months	After 12 months	After 5 years
SOSEM Facilitated financing	128,771	389,489	-
<b>Total</b>	<b>128,771</b>	<b>389,489</b>	<b>-</b>

The item "Advances" includes advances received from customers relating to work in progress for Euro 652,804, which are detailed below by job order and expected duration of the contract (amounts in Euro):

Project	Amount of advance	Within 12 months	After 12 months
EIT	181,729	181,729	-
H2020	213,062	-	213,062
POR Fesr Lazio	129,370	129,370	-
POR Fesr Trento	128,643	-	128,643
<b>Grand total</b>	<b>652,804</b>	<b>311,099</b>	<b>341,705</b>

The debt for bonds corresponds to the total amount of principal outstanding as at 31/12/2019, according to the repayment schedule.

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
---------------	---------------------------

<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

The Company has enforced the option not to use the amortised cost method and not to discount payables, as already specified in these Notes; therefore, they are stated at nominal value.

The item "Tax payables" only includes liabilities for certain and determined taxes, since liabilities for taxes that are likely or uncertain in their amount or date of occurrence, or, if existing, for deferred taxes, are recorded under item B.2 of liabilities (Tax provision).

Amounts due to the tax authorities include the amounts due for withholding taxes, totalling Euro 645,929.

Payables to others mainly consist of amounts due to directors for Euro 181,198, amounts due to personnel for holidays not taken, monthly salaries and bonuses accrued for Euro 1,372,170, credit notes to be issued for Euro 105,500 and smaller amounts due for Euro 22,162.

#### Breakdown of payables by geographical area (Art. 2427, paragraph 1, point 6, of the Italian Civil Code)

The breakdown of Payables by geographical area as at 31/12/2019 is shown in the table below.

#### Details of payables by geographical area

Geographical area	Italy	EEC	Extra-EEC	Invoices to receive	Total
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Bonds	10,000,000	-	-	-	10,000,000
Bank debt	13,270,381	-	-	-	13,270,381
Payables to other lenders	518,260	-	-	-	518,260
Advances	652,804	-	-	-	652,804
Payables to suppliers	2,745,091	7,744	4,851	1,150,282	3,907,968
Payables to subsidiaries	-	1,175	6,811	163,157	171,143
Tax payables	667,917	-	-	-	667,917
Due to social security and welfare institutions	443,689	-	-	-	443,689
Other debts	1,681,030	-	-	-	1,681,030
<b>Payables</b>	<b>29,979,172</b>	<b>8,919</b>	<b>11,662</b>	<b>1,313,439</b>	<b>31,313,192</b>

The following payables are secured by collateral on company assets (Art. 2427, first paragraph, point 6, of the Italian Civil Code).

#### Analysis of payables secured by collateral on company assets (table)

	Payables secured by collateral		Payables not secured by collateral	Total
	Mortgage-backed payables			
Bonds	-	10,000,000	10,000,000	
Bank debt	227,862	13,042,519	13,270,381	
Payables to other lenders	-	518,260	518,260	
Advances	-	652,804	652,804	
Payables to suppliers	-	3,907,968	3,907,968	
Payables to subsidiaries	-	171,143	171,143	
Tax payables	-	667,917	667,917	
Due to social security and welfare institutions	-	443,689	443,689	
Other debts	-	1,681,030	1,681,030	
<b>Total payables</b>	<b>227,862</b>	<b>31,085,330</b>	<b>31,313,192</b>	

It should be noted that the Carige loan for an amount of Euro 250,400, whose residual debt as at 31/12/2019 is of Euro 227,862, taken out in 2018, is secured by a mortgage on the property owned by Expert System S.p.A. in Naples for the amount of Euro 500,800 (Art. 2427, first paragraph, point 6, of the Italian Civil Code).

#### Payables subject to a repurchase agreement (Art. 2427 paragraph 1, point 6-ter of the Italian Civil Code)

At the end of the financial year, there were no transactions that imposed any repurchase obligation on the buyer.



## E) ACCRUED EXPENSES AND DEFERRED INCOME

Valuation criteria and recognition in the Financial Statements (Art. 2427 paragraph 1, point 1, of the Italian Civil Code)

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
3,674,794	3,049,720	625,074

They 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 31/12/2019, there were no accruals and deferrals with a duration of more than five years.

The breakdown of this item is as follows (article 2427, first paragraph, no. 7 of the Italian Civil Code).

Description	Amount
Deferred income for grants for research projects	2,512,713
Deferred income for R&D tax receivable	540,081
Other deferred income	518,614
Accrued expenses	103,385
	<b>3,674,794</b>

### Analysis of changes in accrued expenses and deferred income

	Value at the beginning of the year	Change during the year	Year-end value
Accrued expenses	82,609	20,776	103,385
Deferred income	2,967,111	604,297	3,571,408
<b>Total accrued expenses and deferred income</b>	<b>3,049,720</b>	<b>625,073</b>	<b>3,674,794</b>

Below are details of deferred income relating to grants for research projects broken down by funded project and by expiry date within/after 12 months:

	Deferred income for research project grants	Within 12 months	After 12 months
EIT DIGITAL	570,167	151,404	418,763
H2020	529,036	166,458	362,578
PON FCS	235,907	35,641	200,266
POR Fesr Apiae	198,919	50,012	148,907
POR FESR Lazio	148,123	61,438	86,685
PON R&C	830,563	25,563	805,000
<b>Total</b>	<b>2,512,713</b>	<b>490,516</b>	<b>2,022,198</b>

A portion of deferred income, totalling Euro 540,081, refers instead to tax allowances granted to companies investing in research and development, as per Ministerial Decree no. 17 of 27/05/2015.

Below is the detail of the item:

Deferred income - allowances under Ministerial Decree no. 17 of 27/05/2015	Total item	Within 12 months	After 12 months
Deferred income	540,081	204,200	335,881
<b>Grand total</b>	<b>540,081</b>	<b>204,200</b>	<b>335,881</b>

Other deferred income is detailed below:

Deferred income	Total item	Within 12 months	After 12 months
Hosting fees	33,716	33,716	-
Provision of services	133,364	128,544	4,820
Revenues for maintenance fees	281,129	281,129	-
Licences	70,405	70,405	-
<b>Grand total</b>	<b>518,164</b>	<b>513,794</b>	<b>4,820</b>

## NOTES TO THE ACCOUNTS, INCOME STATEMENT

### A) VALUE OF PRODUCTION

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
26,222,192	23,112,851	3,109,341

Description	31/12/2019	31/12/2018	Changes
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Revenues from sales and services	20,641,036	18,977,922	1,663,113
Changes in work in process on long-term	-	(39,209)	39,209
Increases in fixed assets for internal work	4,331,302	3,101,046	1,230,256
Other revenues and income	1,249,854	1,073,091	176,763
	<b>26,222,192</b>	<b>23,112,851</b>	<b>3,109,341</b>

### 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.

### Details on revenues from sales and services by geographical area (Art. 2427 paragraph 1, point 10 of the Italian Civil Code)

Geographical area	Current year value
Italy	14,168,208
EEC	2,288,597
Extra-EEC	4,188,231
<b>Total</b>	<b>20,641,036</b>

Below is a breakdown of capitalised costs by project:

Type of projects capitalised in 2019	Cost per project
Cogito Answer	19,440
Cogito Discover	450,042
Cogito Intelligence Platform	1,143,319
Core Platform	1,976,378
Cogito Studio	742,122
<b>Grand total</b>	<b>4,331,301</b>

"Other revenues and income", for a total of Euro 1,249,854, include:

- Euro 477,714 relating to the portion pertaining to the year of grants for plants determined in proportion to the amortisation of the R&D costs to which they refer;
- Euro 227,679 as revenues accrued for obtaining R&D tax receivables;
- Euro 544,461 as miscellaneous other income, broken down as follows:

Description	Amount
Rebilling of costs to subsidiaries	437,226
Real estate income	15,803
Reimbursement of miscellaneous expenses	13,731
Royalties	45,210
Other minor revenues	32,491
<b>Grand total</b>	<b>544,461</b>

### Capital contributions

The Group receives contributions from various bodies (European Community at the conditions established by Horizon 2020, Ministry of Education, University and Research, Ministry of Economic Development and other bodies) to finance research and development projects.

These contributions are reclassified under grants for plants as they are intended to finance multi-year investments. The indirect method is used for the accounting of these contributions, as established in OIC 16, which provides for their recognition in proportion to the amortisation of the R&D costs to which they refer.

## B) COSTS OF PRODUCTION

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
24,462,175	19,841,608	4,620,567

Description	31/12/2019	31/12/2018	Changes
Raw, ancillary materials and goods for resale	806,254	1,293,465	(487,211)
Services	9,786,616	6,287,351	3,499,265
Use of third-party assets	937,250	570,337	366,913
Wages and salaries	6,604,757	5,821,002	783,755
Social security charges	1,971,002	1,740,667	230,335
Severance pay	490,180	444,780	45,400
Other personnel costs	4,504	18,167	(13,663)
Amortisation of intangible fixed assets	3,648,843	3,378,010	270,833
Depreciation of tangible fixed assets	132,854	123,847	9,007

Write-down of current receivables	-	40,000	(40,000)
Provision for risks	-	-	-
Other operating expenses	79,915	123,982	(44,067)
<b>Total</b>	<b>24,462,175</b>	<b>19,841,608</b>	<b>4,620,567</b>

### Costs for raw materials, ancillary materials, consumables and goods for sale and Costs for services

They are closely related to the information provided in the section of the Management Report and to performance of point A (Value of production) of the Income Statement.

#### Costs for services

Expenses for services are recorded under costs of production of the income statement for a total of Euro 9,786,616 (Euro 6,287,351 in the previous year).

Individual items are made up as follows:

Description	31/12/2019	31/12/2018	Changes
Insurance	74,961	36,836	38,125
Meal vouchers	118,225	107,199	11,026
ISO certification	4,860	2,000	2,860
Directors' fees	1,079,553	894,472	185,081
Consulting services	6,197,179	3,471,706	2,725,473
Contributions	106,271	102,527	3,744
Emoluments for the Board of Statutory Auditors	14,747	14,560	187
Donations	890	1,840	(950)
Maintenance (plants, furniture, etc.)	139,269	51,164	88,105
Commissions		-	
Miscellaneous refunds	85,889	175,188	(89,299)
Administrative services	22,901	32,088	(9,187)
Commercial services		48,992	(48,992)
Marketing services	315,012	55,938	259,074
Cleaning services	51,609	46,114	5,495
Security services	1,140	3,240	(2,100)
Services for AIM listing	123,743	123,065	678
Food and beverage administration	10,939	2,150	8,789
Condominium expenses	34,632	38,111	(3,479)
Operating expenses	7,005	7,087	(82)
Rental costs	119,653	108,754	10,899
Travel expenses	683,166	535,883	147,230
Bank charges and commissions	42,346	32,467	9,879
Legal expenses	262,860	164,949	97,911

Postage costs	2,007	3,337	(1,330)
Recruitment and selection costs	152,439	66,507	85,932
Translations	25,888	12,456	13,432
Utilities	109,432	148,723	(39,291)
<b>Grand total</b>	<b>9,786,616</b>	<b>6,287,351</b>	<b>3,499,212</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 937,250 (Euro 570,337 in the previous year).

Individual items are made up as follows:

Description	31/12/2019	31/12/2018	Changes
Rental and lease liabilities	219,687	216,935	2,752
Vehicle rental	166,775	145,341	21,434
Cloud rental	550,653	208,061	342,592
Other rentals	135	-	135
<b>Grand total</b>	<b>937,250</b>	<b>570,337</b>	<b>366,913</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.

### Depreciation of tangible fixed assets

As regards depreciation, it should be noted that it is calculated on the basis of the useful life of each asset and its use in production.

### Other operating expenses

Other operating expenses are recorded under costs of production of the income statement for a total of Euro 79,915 (Euro 123,982 in the previous year).

Individual items are made up as follows:

Description	31/12/2019	31/12/2018	Changes
Magazine and newspaper subscriptions	7,424	3,451	3,973
Other costs	8,070	3,996	4,074
Non-deductible costs	9,128	45,386	(36,258)
Taxes and fees	16,438	20,743	(4,305)
Capital losses	-	219	(219)
Fines	1,786	2,514	(728)
Membership fees	37,069	47,673	(10,604)

<b>Grand total</b>	<b>79,915</b>	<b>123,982</b>	<b>(44,067)</b>
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## C) FINANCIAL INCOME AND CHARGES

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
2,159,598	199,379	1,960,219

Income from equity investments (Art. 2427 paragraph 1, point 11 of the Italian Civil Code)

No data to report.

Interest and other financial charges (Art. 2427, paragraph 1, point 12 of the Italian Civil Code)

Description	Subsidiaries	Associated companies	Other	Total
Interest on bonds	-	-	240,194	240,194
Interest on loans	-	-	183,279	183,279
Commissions and financial charges	-	-	64,961	64,961
Adjustment of derivatives	-	-	47,280	47,280
Other charges on financial transactions	-	-	3,660	3,660
<b>Total</b>	<b>-</b>	<b>-</b>	<b>539,374</b>	<b>539,374</b>

Breakdown of interest and other financial charges by type of payable (table)

	Interest and other financial charges
Bonds	240,194
Bank debt	248,240
Other	50,940
<b>Total</b>	<b>439,374</b>

Other financial income

Description	Subsidiaries	Associated companies	Other	Total
Interest on bonds	-	-	-	-
Bank and postal interest	-	-	3,070	3,070
Interest on financing	202,325	-	-	202,325
Income other than the above (subsidiaries)*	2,221,171	-	-	2,221,171

Other income	-	-	17,296	17,296
<b>Total</b>	<b>2,423,496</b>	<b>-</b>	<b>20,366</b>	<b>2,443,862</b>

\*it should be noted that the capital gain on the sale of the equity investment in the subsidiary AdmantX S.p.A., recorded under current assets, is allocated to income statement item C.16.d ("Income other than the above - from subsidiaries").

As explained in the introduction to this document, item C.16.a "Other financial income - from long-term receivables from associated companies" is influenced by a different reclassification of financial income and thus reallocated to item C.16.a "Other financial income - from long-term receivables from other companies"; for the sake of comparability, the 2018 financial statements have also been amended.

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

Receivables and payables originally expressed in foreign currency, recorded at the exchange rates in force on the date they arose, are aligned with the exchange rates in force at the financial statements date.

In particular, assets and liabilities constituting monetary assets and liabilities in foreign currency (*receivables, payables, cash and cash equivalents*) are stated at the spot exchange rate at year-end and the related exchange gains and losses are credited and debited, respectively, to the Income Statement under item 17 bis Foreign exchange gains and losses. Any net profit resulting from the adjustment of items in foreign currency to year-end exchange rates contributes to the formation of the result for the year and, at the time of approval of the financial statements and ensuing allocation of the result, the portion not absorbed by any loss for the year is entered in a non-distributable reserve until its subsequent realisation.

As regards non-monetary foreign currency assets and liabilities (intangible and tangible fixed assets, equity investments and other securities carrying the right to participate in the issuer's risk capital, inventories, advances for the purchase and sale of goods and services, prepaid expenses and deferred income), they are recorded at the exchange rate at the time of purchase.

### **Foreign exchange gains and losses**

Out of the total amount of net profits resulting from the income statement, the unrealised valuation component is positive for Euro 239,609, given by Euro 31,986 as unrealised exchange losses, mainly relating to loans in currencies other than the Euro granted to group



companies, net of unrealised exchange gains of Euro 271,595. In addition, there are Euro 48,265 as realised exchange gains and Euro 32,764 as realised exchange losses.

The amount of Euro 239,609 is entered in a non-distributable reserve until its subsequent realisation.

### Income taxes for the year

Taxes are set aside on an accrual basis; therefore, they represent:

- provisions for taxes paid or to be paid for the year, determined in accordance with current rates and regulations;
- the amount of deferred or prepaid taxes in relation to temporary differences arising or cancelled during the year.

Deferred and prepaid IRES is calculated on the temporary differences between the values of assets and liabilities determined according to statutory criteria and the corresponding tax values, applying the 24% rate.

Deferred and prepaid IRAP is calculated on the temporary differences between the values of assets and liabilities determined according to statutory criteria and the corresponding tax values, applying the 3.9% rate.

Balance as at 31/12/2019	Balance as at 31/12/2018	Change
305,274	885,833	(580,559)

Taxes	Balance as at 31/12/2019	Balance as at 31/12/2018	Changes
<i>Current taxes</i>	116,736	180,515	(63,779)
IRES	0	0	0
IRAP	116,736	180,515	(63,779)
<i>Taxes relating to previous years</i>			
<i>Deferred (prepaid) taxes</i>	188,538	705,318	(516,780)
IRES	188,538	705,318	(516,780)
IRAP	0	0	0
<b>Total</b>	<b>305,274</b>	<b>885,833</b>	<b>(580,559)</b>

The taxes for the year are duly stated.

The reconciliation between the theoretical burden resulting from the financial statements and the theoretical tax burden is set out below.

## Reconciliation between the tax burden resulting from the financial statements and the theoretical tax burden (IRES)

Description	Value	Taxes
Theoretical tax burden (%)		24%
Result for the year	3,614,341	867,442
Temporary differences taxable in subsequent years:		
Unrealised profit on exchange rates	(271,595)	(65,183)
	(271,595)	(65,183)
Temporary differences deductible in subsequent years:		
Unrealised losses on exchange rates	31,986	7,677
	31,986	7,677
<b>Transfer of temporary differences from previous years</b>		
Change in foreign currency items for collection of receivables in foreign currency	21,610	5,186
Use of the bad debt provision	0	0
	21,610	5,186
<b>Differences that will not spill over in subsequent years</b>		
Upward changes	898,698	215,688
Downward changes	(3,585,569)	(860,537)
	(2,686,872)	(644,849)
Taxable income	709,471	170,273
Previous losses	(567,577)	(136,218)
ACE [Italian Allowance for Corporate Equity]	(141,894)	(34,055)
Current income taxes for the year		<b>0</b>

## Determination of IRAP tax base

Description	Value	Taxes
Differences between value and costs of production	10,830,460	
Irrelevant costs for IRAP purposes	1,415,141	
Irrelevant revenues for IRAP purposes	(227,679)	
Tax wedge	(8,970,933)	
	<b>3,046,989</b>	
Theoretical tax burden (%)	3.9	116,736
<b>Temporary difference taxable in subsequent years:</b>		
IRAP tax base	3,046,989	
<b>Current IRAP for the year</b>		<b>116,736</b>

It should be noted that the company carries out production activities that are relevant for IRAP purposes in various regions (Emilia Romagna, Trentino Alto Adige, Campania, Lazio, Veneto and Lombardy); for this reason, the overall tax base is determined in proportion to the amount of wages and remuneration due to employees and coordinated and ongoing collaborators operating in the various regions, respectively, with respect to the overall amount of wages and remuneration.

Pursuant to article 2427, first paragraph no. 14, of the Italian Civil Code, the information required on deferred and prepaid taxation is set out below .

### Deferred / prepaid taxation

Deferred taxation is expressed by the increase in the deferred tax provision of Euro 22,320 and by the decrease in deferred tax assets of Euro 136,218, applying the 24% rate.

Deferred taxes are calculated on a global allocation basis, taking into account the cumulative amount of all temporary differences, based on the average expected rates in force at the time when these temporary differences are transferred.

Deferred tax assets are recognised since there is reasonable certainty of the existence, in the years of transfer of the deductible temporary differences for which deferred tax assets are recognised, of taxable income not less than the amount of the differences that will be annulled.

The main temporary differences leading to the recognition of deferred tax assets and liabilities are shown in the table below together with the related effects.

### Recognition of deferred tax assets and liabilities and related effects

	IRES	IRAP
<b>A) Temporary differences in 2019</b>		
Total deductible temporary differences	53,597	-
Total taxable temporary differences	(271,595)	-
Net temporary differences	(217,998)	-
<b>B) Tax effects</b>		
Provision for deferred (prepaid) taxes at the beginning of the year	(122,919)	-
Deferred (prepaid) taxes for the year	188,538	-
Provision for deferred (prepaid) taxes at year-end	65,619	-

### Details of taxable temporary differences

Description	Amount at the end of the previous year	Change during the year	Amount at year-end	IRES rate	IRES tax effect
Tax losses	859,420	(567,577)	291,843	24%	70,043
Legal risk adjustment	35,238	-	35,238	24%	8,457
<b>Total</b>	<b>894,658</b>	<b>567,577</b>	<b>327,081</b>		<b>78,500</b>

### Details of deductible temporary differences

Description	Amount at the end of the previous year	Change during the year	Amount at year-end	IRES rate	IRES tax effect
Transfer of unrealised exchange losses for collection of receivables in foreign currency	137,109	(21,610)	115,499	24%	27,720
Unrealised profit on exchange rates	1,336,183	271,595	1,607,777	24%	385,868
Unrealised losses on exchange rates	(1,090,798)	(31,986)	(1,122,784)	24%	(269,468)
<b>Total</b>	<b>382,494</b>	<b>217,998</b>	<b>600,492</b>		<b>144,119</b>

## Information on tax losses

	Current year			Previous year		
	Amount	Tax rate	Deferred tax assets recognised/ (used)	Amount	Tax rate	Deferred tax assets recognised/ (used)
Tax losses						
- of the financial year				-	24%	-
- of previous years	859,420	24%	206,261	3,252,522	24%	780,605
Total tax losses	859,420	24%	206,261	3,252,522	24%	780,605
Use during the year	(567,577)	24%	(136,218)	(2,393,102)	24%	(574,345)
<b>Tax losses carried forward and recoverable with reasonable certainty</b>	<b>291,843</b>	<b>24%</b>	<b>70,043</b>	<b>859,420</b>	<b>24%</b>	<b>206,261</b>

Deferred tax assets of Euro 70,043 arising from tax losses that can be carried forward, net of utilizations made in 2019, are maintained in the financial statements, since the conditions required by accounting standards for the recognition of the future tax benefit are met, in particular the reasonable certainty that the company will achieve taxable income in the future such as to absorb these losses.

## Amount and nature of each of revenue/cost item of exceptional amount or incidence (Art. 2427, paragraph 1, point 13, of the Italian Civil Code)

It should be noted that in 2019 no individual revenue or cost items of an exceptional amount or incidence were recorded, with the exception of the capital gain (Euro 2,221,171) relating to the sale of the entire equity investment in the subsidiary AdmantX S.p.A. mentioned elsewhere in these Notes.

## NOTES TO THE ACCOUNTS, OTHER INFORMATION

With reference to the financial year as at 31/12/2019, this section of the Notes provides the following information, in accordance with the outline required by the XBRL taxonomy and in compliance with Art. 2427 of the Italian Civil Code and other legal provisions:

- employment data;
- remuneration, advances and credits granted to directors and statutory auditors and commitments undertaken on their behalf;
- fees of external auditor or audit firm;
- classes of shares issued by the company;
- securities issued by the company;
- information on other financial instruments issued by the company;
- commitments, guarantees and potential liabilities not shown on the balance sheet;
- information on financing provided by shareholders;
- information on assets and financing for a specific business;
- information on related party transactions;
- information on agreements not shown on the balance sheet;
- information on significant events occurred after year end;
- undertakings which prepare the consolidated financial statements of the largest/smallest group of undertakings to which the company belongs as a subsidiary;
- information on derivative instruments;
- table summarising the financial statements of the company exercising management and coordination activities;
- information on start-ups, including those with a social mission, and innovative SMEs;
- proposed allocation of profits or coverage of losses.

In addition, it should be noted that the final comment to this section of the Notes provides the following additional information:

- any significant effect of changes in currency exchange rates occurred after year end (Art. 2427, paragraph 1, point 6-bis, of the Italian Civil Code);
- equity investments involving unlimited liability;
- information pursuant to Art. 1, paragraph 125, of Law no. 124 of 4 August 2017.

Please also note that the following information has already been provided in these Notes:

- table and information on revaluations;
- reserves and funds to be taxed if distributed.

## Employment data

### (Art. 2427 paragraph 1, point 15 of the Italian Civil Code)

The company's average workforce, expressed in AWU, broken down by category, has undergone the following changes compared to the previous year.

Workforce	31/12/2019	31/12/2018	Changes
Middle managers	38	28	10
Employees	106	130	(24)
	<b>144</b>	<b>158</b>	<b>(14)</b>

The applicable national employment contract is that of the service sector - trade (last renewed on 01/04/2015).

### Information on the remuneration of directors and statutory auditors (Art. 2427 paragraph 1, point 16 of the Italian Civil Code)

In accordance with the law, information is given on the total remuneration payable to directors and the control body (article 2427, paragraph 1, no. 16 of the Italian Civil Code).

### Amount of remuneration, advances and credits granted to directors and statutory auditors and commitments undertaken on their behalf (table)

	Directors	Statutory auditors
Remuneration	1,185,824	14,747

### Information on the remuneration payable to the external auditor (Art. 2427, paragraph 1, point 16-bis, of the Italian Civil Code)

In accordance with the law, the yearly fees for services rendered by the audit firm BDO Italia S.p.A. and entities within its network are stated:

### Amount of remuneration payable to the external auditor or audit firm

	Value
Statutory audit of annual accounts	21,417

Total remuneration payable to the external auditor or audit firm	21,417
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## Classes of shares issued by the company (Art. 2427, paragraph 1, point 17 of the Italian Civil Code)

### Analysis of the classes of shares issued by the company (table)

Description	Shares subscribed during the year, number	Initial volume, number	Final volume, number
Common shares	4,157,040	35,859,031	40,016,071
<b>Total</b>	<b>4,157,040</b>	<b>35,859,031</b>	<b>40,016,071</b>

During the year, 4,157,040 new common shares with no par value were subscribed, broken down as follows:

- 3,888,889 shares as part of the capital increase fully subscribed by Ergo S.r.l.;
- 76,600 shares in implementation of the "Stock Grant 2018-2020" plan;
- 111,151 shares in implementation of the "Stock Grant Temis 2016-2020" plan;
- 80,400 shares in implementation of the "Stock Option 2018-2020" plan.

For further details on the operation mentioned herein, please refer to the initial part of the Notes to the Accounts.

## Shares with dividend rights, bonds convertible into shares, securities or similar instruments issued by the company (Art. 2427, paragraph 1, point 18 of the Italian Civil Code)

The shares and securities issued as at 31/12/2019 are as follows:

Shares and securities issued by the company	Number	Rate	Maturity	Rights granted
Common shares	40,016,071			
Bonds	50	4%	31/12/2024	
	50	Eur 3M + 225bp	02/08/2026	

## Analysis of securities issued by the company

	Number	Rights granted
Shares with dividend rights	0	0
Convertible bonds	0	0
Warrants	0	0
Options*	0	0
Other securities or similar	0	0

\*reference should be made to the information provided in another paragraph of these Notes to the Accounts

## Information on financial instruments issued by the company (Art. 2427 paragraph 1, point 19 of the Italian Civil Code)

The company has issued a debenture loan consisting of 50 non-convertible bonds, with a nominal value of Euro 100,000 each, for a total amount of Euro 5,000,000. The bond is reserved to professional investors and has been 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
<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

In 2019 the company also issued a debenture loan consisting of 50 non-convertible bonds, with a nominal value of Euro 100,000 each, for a total amount of Euro 5,000,000. The bond issue has been 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

## Introduction, commitments, guarantees and potential liabilities not shown on the balance sheet (Art. 2427, paragraph 1, point 9 of the Italian Civil Code)

At the end of the financial year, the following guarantees were in place:

	Initial balance	Final balance	Change
<b>SURETIES</b>	2,109,432	1,214,618	(894,814)
- to subsidiaries	600,000	-	(600,000)
- to other companies	1,509,432	1,214,618	(294,814)



These are sureties to credit institutions for Euro 1,214,058; the main changes that occurred in the first half of the year are:

- the cancellation on 10/01/2019 of the Euro 500,000 guarantee issued by Banca MPS S.p.A. in favour of the former shareholders of Temis S.A., now Expert System France S.A., as part of the closing of the acquisition of the French group completed in September 2015. The cancellation followed full payment of the secured creditors by Expert System S.p.A;
- the cancellation on 28/11/2019 of the specific determined surety, concerning an unsecured loan of the same amount taken out in 2017, issued in favour of the subsidiary ADmantXS.p.A.. The cancellation followed full payment of the residual debt by the company that acquired the entire share capital of ADmantXS.p.A..

**Financing provided by shareholders to the company (Art. 2427, paragraph 1, point 19-bis, of the Italian Civil Code)**

No data to report.

**Assets allocated to a specific business (Art. 2427, paragraph 1, point 20 of the Italian Civil Code)**

The Company has not set up assets to be used for a specific business.

**Financing for a specific transaction (Art. 2427 paragraph 1, point 21 of the Italian Civil Code)**

At the closing date of the financial year in question, the Company did not have any financing contracts in place for a specific transaction.

**Financial leasing transactions (Art. 2427, paragraph 1, point 22, of the Italian Civil Code)**

As at 31/12/2019 the Company had no financial leasing contracts in place.

**Information required by law on start-ups, including those with a social mission, and innovative SMEs**

Within Expert System's strategy, significant investments in research and development have been and continue to be crucial to 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.

As for the development tools used for the customisation of projects, most efforts were centred around the creation of a completely new version of Cogito Studio that will be released by April 2020 and with which it is will be possible to create custom projects in a much easier and faster way.

The increase in activities compared to the previous year allowed the company to implement the first version of the Cogito APIs, which were made available to a small group of customers for the first trials at the end of 2019 and will be released by the second quarter of 2020.

The third most strategic front for the future was represented in the year by the early stages of implementation of a new component that can analyse a PDF document, recognise its structure and identify its most important elements: for a better understanding of the content of a document, in addition to the actual text, it is often very important to recognise the layout of the document and its formatting. The component will be able to recognise the following elements of the document: titles and subtitles, indexes, text columns, tables, headers and footers, text formatting, bulleted and numbered lists.

Other significant activities pursued during the year were:

- the release of the new version of Cogito intelligence Platform;
- the release of the beta version of Cogito for Life Science;
- the restructuring and expansion of the knowledge graph for several languages (German, Arabic, Dutch, Chinese, Russian);
- the enhancement of the C and E language used within Cogito Studio to create categorisation and extraction projects;
- new developments on the intelligent analysis of complex documents.

Below is a breakdown of capitalised costs by project:

Type of projects capitalised in 2019

Type of projects capitalised in 2019	Cost per project
Cogito Answer	19,440
Cogito Discover	450,042
Cogito Intelligence Platform	1,143,319

Core Platform	1,976,378
Cogito Studio	742,122
<b>Grand total</b>	<b>4,331,301</b>

It should be noted that capitalised research and development costs (relating to employees and external technical consultants), amounting to Euro 4,331,301, are higher than 3% (Euro 786,666) of the greater of the value (Euro 26,222,192) and costs (Euro 24,462,175) of production, thus meeting one of the three conditions to maintain the status of an innovative SME; the second condition that is met to maintain the status of an innovative SME is related to possession of a patent (application number US 11/744, 479 - publication date 1/3/2011 - registration date 4/5/2007 - priority date 4/5/2007).

The patent, called "METHOD AND SYSTEM FOR AUTOMATICALLY EXTRACTING RELATIONS BETWEEN CONCEPTS INCLUDED IN TEXT", concerns a method and system for the automatic extraction of relations between concepts included in the electronic text.

### Information on related party transactions (Art. 2427 paragraph 1, point 22-bis, of the Italian Civil Code)

Below is information concerning related party transactions carried out by the parent company Expert System S.p.A..

#### Trade and financial relations

Company	Financial payables	Financial receivables	Trade receivables	Trade payables	Sales	Purchases
ADMANTX S.P.A.	-	128,051	163,323	-	101,650	-
EXPERT SYSTEM USA INC.	-	5,609,625	959,809	6,811	682,412	82,271
EXPERT SYSTEM COGITO LTD.	-	739,866	889,832	-	613,378	30,358
EXPERT SYSTEM IBERIA S.L.U.	-	2,856,976	1,540,389	27,514	521,714	43,807
EXPERT SYSTEM FRANCE S.A.	-	1,424,023	1,457,829	105,576	1,058,812	128,501
EXPERT SYSTEM ENTERPRISE CORP.	-	2,408,632	3,714,871	30,065	1,263,766	63,392
EXPERT SYSTEM DEUTSCHLAND GMBH	-	943,996	206,172	-	160,226	-
EXPERT SYSTEM CANADA Semantic Technologies Inc.	-	-	21,727	-	16,437	-
<b>Total</b>	<b>-</b>	<b>14,111,169</b>	<b>8,953,952</b>	<b>169,966</b>	<b>4,418,395</b>	<b>348,329</b>

#### Trade relations

EXPERT SYSTEM S.P.A.

FINANCIAL STATEMENTS - 31 DECEMBER 2019

Company	Payables	Receivables	Guarantees	Commitments	Costs	Revenues
ADMANTX S.P.A.	-	163,323	-	-	-	100,398
EXPERT SYSTEM USA INC.	6,811	959,809	-	-	82,271	598,547
EXPERT SYSTEM COGITO LTD.	-	889,832	-	-	30,358	602,067
EXPERT SYSTEM IBERIA S.L.U.	27,514	1,540,389	-	-	43,807	477,999
EXPERT SYSTEM FRANCE S.A.	105,576	1,457,829	-	-	128,501	1,035,645
EXPERT SYSTEM ENTERPRISE CORP.	30,065	3,714,871	-	-	63,392	1,236,143
EXPERT SYSTEM DEUTSCHLAND GMBH	-	206,172	-	-	-	148,833
EXPERT SYSTEM CANADA Semantic Technologies Inc.	-	21,727	-	-	-	16,437
<b>Total</b>	<b>169,966</b>	<b>8,953,952</b>	<b>-</b>	<b>-</b>	<b>348,329</b>	<b>4,216,069</b>

### Financial relations

Company	Payables	Receivables	Guarantees	Commitments	Charges	Income
ADMANTX S.P.A.	-	128,051	-	-	-	1,252
EXPERT SYSTEM USA INC.	-	5,609,625	-	-	-	83,865
EXPERT SYSTEM COGITO LTD.	-	739,866	-	-	-	11,311
EXPERT SYSTEM IBERIA S.L.U.	-	2,856,976	-	-	-	43,715
EXPERT SYSTEM FRANCE S.A.	-	1,424,023	-	-	-	23,167
EXPERT SYSTEM ENTERPRISE CORP.	-	2,408,632	-	-	-	27,623
EXPERT SYSTEM DEUTSCHLAND GMBH	-	943,996	-	-	-	11,393
EXPERT SYSTEM CANADA Semantic Technologies Inc.	-	-	-	-	-	-
<b>Total</b>	<b>-</b>	<b>14,111,169</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>202,326</b>

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

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

For the company ADmantX S.p.A., the amounts relating to the transactions detailed below, up to the date of the sale of the equity investment, which took place on 20/11/2019, are shown in the tables above.

#### Sale

EXPERT SYSTEM S.P.A.

FINANCIAL STATEMENTS - 31 DECEMBER 2019

- Rental contract for a building in Naples, Via Nuova Poggioreale 60/L, Centro Polifunzionale Inail, where the company's registered office is located: Euro 4,524 rent;
- Sublease contract for a local unit in Modena, Viale Virgilio 58/M1: Euro 3,273 rent;
- Sublease contract for a local unit in Milan, Piazza Cavour: Euro 5,473 rent;
- Contract for the provision of services relating to accounting support, business economic-financial consultancy, secretarial and general services:
  - Remuneration for accounting support, business consultancy and recruiting for Euro 21,363;
  - Remuneration for secretarial activities for Euro 1,068;
  - Remuneration for general services (telephony, cleaning services and materials, security, electricity, stationery, management software maintenance): Euro 8,269 reimbursement calculated as a lump sum of 4.15% of the expenses incurred by Expert System S.p.A.
- Sale of licence for Euro 53,242;
- Reimbursement of insurance expenses for Euro 1,585;
- Reimbursement of miscellaneous expenses for Euro 1,601;
- Granting of a Euro 100,000 loan with interest in 2019 for Euro 1,252.

The balance sheet items affected by these contracts are reclassified in the following accounts until 20/11/2019:

- B.III.2 Receivables from subsidiaries;
- C.II.2 Receivables from subsidiaries.

Income statement items are reclassified in the following accounts:

- A.1 Revenues from sales and services;
- A.5 Other revenues and income

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

- Granting of a Euro 5,287,073 loan to the subsidiary with interest in 2019 for Euro 83,865.

### **Sale**

- Concession of licences for Euro 505,829;
- Provision of professional services for Euro 11,471;
- Maintenance fees for Euro 75,988;
- Reimbursement of miscellaneous expenses for Euro 5,259.

#### Purchase

- Costs for miscellaneous reimbursements for Euro 1,501;
- Professional services provided by the subsidiary for Euro 80,770.

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

- Granting of a Euro 670,721 loan to the subsidiary with interest in 2019 for Euro 11,311.

#### Sale

- Provision of professional services for Euro 307,519;
- Concession of licences for Euro 203,448;
- Reimbursement of miscellaneous expenses for Euro 71,564;
- Maintenance fees for Euro 19,536.

#### Purchase

- Costs for miscellaneous reimbursements for Euro 30,358.

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

- Granting of a Euro 2,616,000 loan to the subsidiary with interest in 2019 for Euro 43,715

#### Sale

- Provision of professional services for Euro 122,828;
- Concession of licences for Euro 203,154;
- Reimbursement of miscellaneous expenses for Euro 120,985;
- Maintenance fees for Euro 31,032.

#### Purchase

- Provision of professional services by the subsidiary for Euro 43,807;

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

- Granting of a Euro 1,334,174 loan to the subsidiary with interest in 2019 for Euro

23,167

### Sale

- Provision of professional services for Euro 188,131;
- Concession of licences for Euro 606,813;
- Maintenance fees for Euro 124,482;
- Reimbursement of miscellaneous expenses for Euro 116,219.

### Purchase

- Professional services provided by the subsidiary for Euro 24,161;
- Development services provided by the subsidiary for Euro 53,281.
- Costs for miscellaneous reimbursements for Euro 51,059.

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

- Granting of a Euro 2,305,917 loan to the subsidiary with interest in 2019 for Euro 27,623.

### Sale

- Concession of licences for Euro 533,874;
- Provision of professional services for Euro 164,395;
- Maintenance fees for Euro 458,612;
- Reimbursement of miscellaneous expenses for Euro 79,262.

### Purchase

- Provision of professional services by the subsidiary for Euro 63,392.

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

- Granting of a Euro 930,000 loan to the subsidiary with interest in 2019 for Euro 11,393.

### Sale

- Provision of professional services for Euro 51,360;
- Concession of licences for Euro 14,400;
- Maintenance fees for Euro 39,137;
- Reimbursement of miscellaneous expenses for Euro 43,936.

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

### Sale

- Maintenance fees for Euro 14,233;
- Reimbursement of miscellaneous expenses for Euro 2,204.

**Information on agreements not shown on the balance sheet (Art. 2427 paragraph 1, point 22-ter of the Italian Civil Code)**

The Company has no arrangements in place that are not reflected in the Balance Sheet.

**Information on significant events occurred after year end (Art. 2427, paragraph 1, point 22-quater, of the Italian Civil Code)**

Please refer to the introduction to this document.

**Undertakings preparing the consolidated financial statements of the largest/smallest group of undertakings to which the company belongs as a subsidiary (Art. 2427, paragraph 1, points 22-quinquies and 22-sexies, of the Italian Civil Code)**

The Company prepares the consolidated financial statements in its capacity as parent company.

**Information on the fair value of derivative financial instruments (Art. 2427-bis, paragraph 1, point 1, of the Italian Civil Code)**

For the information required by Art. 2427-bis, paragraph 1, point 1, of the Italian Civil Code, please refer to the preceding paragraphs of these Notes.

**Information on the fair value of financial fixed assets (Art. 2427-bis paragraph 1, point 2 of the Italian Civil Code)**

There are no financial fixed assets stated at a value higher than their fair value.

**Information on the company or entity exercising management and coordination activities (Art. 2497-bis, paragraph 4, of the Italian Civil Code)**

The Company is not subject to management or coordination by third party companies or entities.

**Table and information on revaluations**

Reference should be made to the information provided in another paragraph of these Notes to the Accounts.

**Reserves and funds to be taxed if distributed**

Reference should be made to the information provided in another paragraph of these Notes to the Accounts.



## Equity investments involving unlimited liability

Pursuant to the provisions of Art. 2361, paragraph 2 of the Italian Civil Code, it should be noted that the company has not acquired equity investments in other companies involving unlimited liability.

## Information pursuant to Art. 1, paragraph 125, of law no. 124 of 4 August 2017

It should be noted that, pursuant to Law no. 124/2017, paragraph 125-129 of Art. 1, the so-called annual Law for the market and competition, our Company received the following amounts in 2019, as partial coverage of costs incurred and/or by way of contributions (cash basis):

Receiving party name	Name of the grantor	Amount (data in Euro)	Collection date	Reason for payment	Project
Expert System S.p.A.	LAZIO INNOVA	61,034	25/01/2019	Advance contribution	Application PROT. No. A0112-2016-13343 - CUP F87H18000570007 - Public Notice 'LIFE 2020' referred to in Resolution No. G08726 of 29/07/2016 - POR FESR LAZIO 2014 - 2020 - Integrated Projects
	APIAE - AUTONOMOUS PROVINCE OF TRENTO	128,643	12/03/2019	Advance contribution	ERDF call for proposals No. 6/2017 Aid for the promotion of research and development - evaluation procedure. Allowance application submitted on 17 April 2018. Research project called "Red Flags - Robots for the automatic detection of sentinel symptoms in clinical documents" - CUP: C73D18000360004
	EIT DIGITAL	19,048	13/03/2019	Advance contribution	18189 CREEP
	EIT DIGITAL	55,116	10/06/2019	Advance contribution	EIT DIGITAL 2019
	EIT DIGITAL	55,116	11/07/2019	Advance contribution	EIT DIGITAL 2019
	EIT DIGITAL	99,134	14/08/2019	Project balance	18189 CREEP
	LAZIO INNOVA	32,028	16/09/2019	Work progress payment	Application PROT. No. A0112-2016-13343 - CUP F87H18000570007 - Public Notice 'LIFE 2020' referred to in Resolution No. G08726 of 29/07/2016 - POR FESR LAZIO 2014 - 2020 - Integrated Projects
	EC	55,673	04/10/2019	Project balance	680676 - OptEEmAL - H2020-EeB-2014-2015/H2020-EeB-2015
	EIT DIGITAL	71,497	15/10/2019	Advance contribution	EIT DIGITAL 2019
	LAZIO INNOVA	26,331	15/10/2019	Work progress payment	COURIER APPLICATION No. A0113-2017-13652 of 31/01/2017 code CUP F83G17000860007 Public Notice "Aerospace and Security" referred to in Resolution No.

					G13676 of 21/11/2016 - POR FESR LAZIO 2014 - 2020 - Integrated Projects
	MIUR [Italian Education, University and Research Ministry]	6,644	19/12/2019	Project balance	FAR PROJECT: ART. 9 Ministerial Decree 593/00 Prot. 1569 OF 13/02/2004 "OSINT" training project - 17/02/2011 Dir. Decree No. 2059/Ric. Published on OJ No. 108 of 9-5-2008 - Ordinary Suppl. No. 116
	AUTONOMOUS PROVINCE OF TRENTO	1,798	01/01/2019 - 31/01/2019	DE MINIMIS AID	Reduction of property rental in Rovereto (TN)

In the absence of clear indications on the part of the Ministry, the Company has referred to a recent Assonime circular in which non-selective advantages or those accessible to all companies according to predetermined general criteria, as is the case for tax benefits, are considered to be excluded from the disclosure obligation.

It should also be noted that during the year that ended on 31/12/2019, the Company received the following benefits:

- Tax receivable on Research and Development pursuant to Law 190/2014 accrued in 2018 for Euro 349,688 and used for offsetting purposes in 2019.

#### **Proposed allocation of the result for the year (Art. 2427 paragraph 1, point 22-septies, of the Italian Civil Code)**

It is proposed that the shareholders' meeting allocate the profit for the year equal to Euro 2,614,340.99 as follows:

- euro 8,314.08 to increase the legal reserve;
- euro 2,606,026.91 to increase the extraordinary reserve.

#### **Changes in currency exchange rates (Art. 2427, paragraph 1, point 6-bis of the Italian Civil Code)**

No significant changes in exchange rates compared to the closing date of the financial year as at 31/12/2019 have occurred.

These financial statements, consisting of the Balance Sheet, Income Statement and Notes to the Accounts, give a truthful and accurate account of the company's financial position and results of operations for the year and match its accounting records.

Chairman of the Board of Directors

*Marco Varone*



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

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

Financial statements at 31 December 2019

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

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

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

### Report on the financial statements

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#### Opinion

We have audited the financial statements of Expert System S.p.A. (the Company), which comprise the balance sheet as of December 31, 2019, the statement of income, the statement of changes in equity, the cash flow statements and related explanatory notes.

In our opinion the financial statements give a true and fair view of the financial statements of the Company as at December 31, 2019 and of the result of its operations for the year then ended in accordance with the Italian regulations and accounting principles governing financial statements.

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#### Basis for opinion

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

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

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

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

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

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

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

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

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

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

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

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

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

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## Report on other legal and regulatory requirements

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

The directors of Expert System S.p.A. are responsible for the preparation of the report on operations of Expert System S.p.A. as at December 31, 2019, including its consistency with the financial statements and the compliance with the applicable laws and regulations.

We have performed the procedures required under audit standard (SA Italia) n. 720B in order to express an opinion on the consistency of the report on operations, with the financial statements of Expert System S.p.A. as at December 31, 2019 and on its compliance with the applicable laws and regulations, and in order to assess whether they contain material misstatements.

In our opinion, the report on operations is consistent with the financial statements of Expert System S.p.A. as at December 31, 2019 and is compliant with applicable laws and regulations.

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

Bologna, April 10, 2020

BDO Italia S.p.A.

Alessandro Gallo  
Partner

**EXPERT SYSTEM S.p.A.**  
Via Fortunato Zeni 8, Rovereto (Trento)  
Share capital € 411,271.82 fully paid-in  
Tax Code and Modena Register of Companies no. 02608970360  
Trento Economic and Administrative Index ref. no. 212386  
\*\*\*\*\*

**REPORT OF THE BOARD OF STATUTORY AUDITORS**  
**ON THE FINANCIAL STATEMENTS FOR THE YEAR ENDED 31**  
**DECEMBER 2019**

To the shareholders of Expert System S.p.A.

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The draft financial statements as at and for the year ended 31 December 2019, which the Board of Directors submits for your approval, were prepared in accordance with the provisions of article 2423 et seq. of the Italian Civil Code.

**Activity carried out**

During the year ended 31 December 2019 we supervised the compliance with law, and the Articles of Association, and compliance with the principles of sound management. In completing this assignment we made use of indications provided in the Code of Conduct for Boards of Statutory Auditors as recommended by the Italian National Institute of Chartered Accountants.

The supervisory tasks were performed through:

- action taken to verify compliance with the provisions of law and the Articles of Association;
- attendance of meetings of the Corporate Bodies;



- acquisition of information on the audits performed by the Independent Auditors.

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With reference to the activity carried out in 2019, note that:

- we attended the shareholders' meetings and meetings of the Board of Directors, conducted in accordance with governing statutory, legal and regulatory instructions, and for which we can reasonably confirm that the actions decided comply with the law and the Articles of Association and are not manifestly imprudent, risky, in conflict of interest or such as to jeopardise the integrity of the company capital;
- we obtained information from the Directors on the general operating performance, on business outlook and on the most significant transactions - in terms of extent or characteristics - performed by the company, and we can reasonably confirm that the action taken complies with the law and the Articles of Association and are not manifestly imprudent, risky, in conflict of interest or in conflict with the resolutions adopted by the shareholders' meeting or such as to jeopardise the integrity of the company capital;
- we received no significant data or information from the Independent Auditors that would require comment in this report;
- we acquired knowledge of and supervised the adequacy of the company's organisational structure, also by obtaining information from the department managers. In this respect, note that we have no particular matters to report;

- we assessed and supervised over the adequacy of the administrative and accounting system and its reliability in correctly reporting upon operating events, by obtaining information from the department managers and by examining corporate documents. Also in this respect we have no particular matters to report;
- no reports were received pursuant to art. 2408 of the Italian Civil Code and no opinions were issued that would be required under specific legal regulations.

### **1. Annual Financial Statements**

With regard to supervision over the presentation of the annual financial statements, we confirm that:

- we verified their general format, their general compliance with law as regards their format and content, and in this respect have no particular matters to report;
- we expressed our consent to the recognition under balance sheet assets of start-up and expansion costs totalling € 17,106 and development costs totalling € 4,331,302;
- to the best of our knowledge, in preparing the financial statements the Directors did not deviate from legal provisions pursuant to art. 2423, paragraphs 4 and 5, and art. 2423-bis, par. 2, of the Italian Civil Code;
- we verified correspondence between the financial statements and the events and information that came to our knowledge while performing our duties, and in this respect have no matters to report.

## 2. Conclusions

Based on the audits performed and information exchanged with the Independent Auditors, and also taking into account their report issued on 10 April 2020 with no irregularities found, to the extent of our specific responsibilities we believe that the annual financial statements as at 31 December 2019, as prepared by the Directors, can meet with your approval. In thanking you for the trust placed in us, we invite you to resolve accordingly.

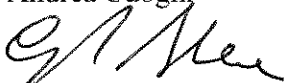
Milan, 10 April 2020

THE STATUTORY AUDITORS

Alessandro Augusto



Andrea Cuoghi



Antonio Tazzioli

