2019 Financial Report

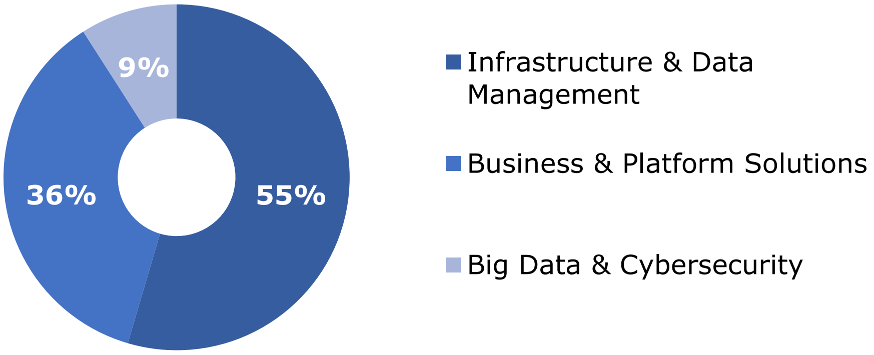
Table of content

A. Group overview

A.1 Revenue profile

A.1.1 By Division

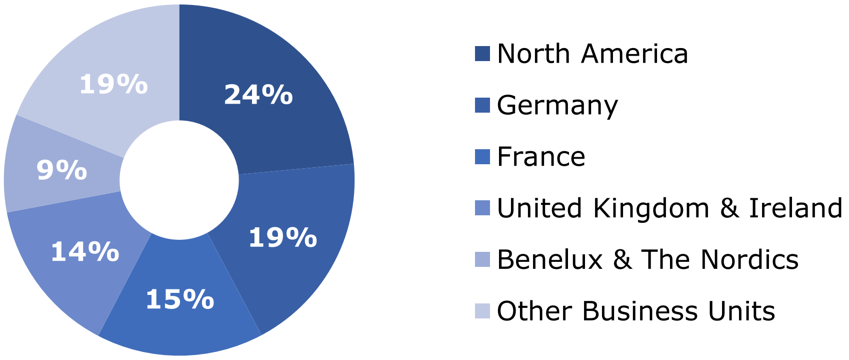
In 2019, 64% of the Group revenue was generated by multi-year contracts, deriving from Infrastructure & Data Management (55% of total revenue), Application Management contracts included in Business & Platform Solutions, and half of Big Data & Cybersecurity (respectively 5% and 5%).



In € million	2019
Infrastructure & Data Management	6,321
Business & Platform Solutions	4,216
Big Data & Cybersecurity	1,050
Total	**11,588**

A.1.2 By Business Unit

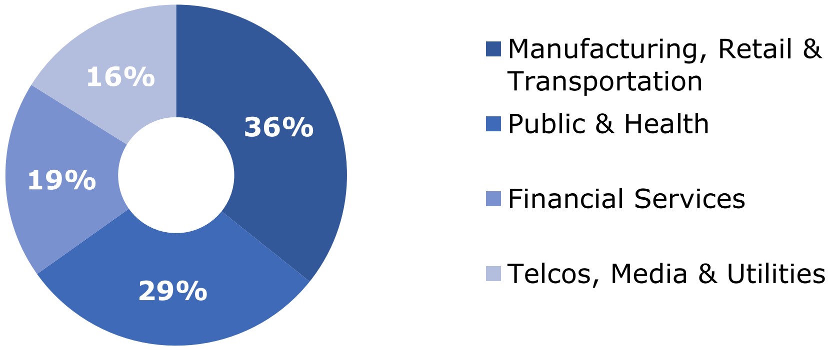
Europe and North America are the Group's main operational bases, generating 93% of total revenue in 2019.



In € million	**2019**
North America	2,725
Germany	2,167
France	1,788
United Kingdom & Ireland	1,669
Benelux & The Nordics	1,047
Other Business Units	2,192
Total	**11,588**

A.1.3 By Market

The Group provides high value-added digital services and solutions to many industry sectors. Customers are addressed through four global markets which are Manufacturing, Retail & Transportation, Financial Services Public & Health, and Telcos, Media & Utilities.



In € million	2019
Manufacturing, Retail & Transportation	4,139
Public & Health	3,411
Financial Services	2,169
Telcos, Media & Utilities	1,869
Total	**11,588**

A.2 Business profile

Atos is a global leader in digital transformation with over 100,000 employees in 73 countries and annual revenue of over € 11 billion. European number one in cloud, cybersecurity and High-Performance Computing, the Group provides end-to-end vertical solutions, smart data platforms and infrastructure solutions, leveraging highly innovative technologies in business platforms, customer experience and digital workplace, artificial intelligence and hybrid cloud. The Group is the Worldwide Information Technology Partner for the Olympic & Paralympic Games and operates under the brands Atos, Atos Syntel, and Unify. Atos is a SE (Societas Europaea), listed on Euronext Paris and included in the CAC40 stock index.

At Atos, our mission is to help design the future of the information technology space. Our services and expertise, multiculturally delivered, support the advance of knowledge, education and science and contribute to the development of scientific and technological excellence. Across the world, we enable our customers, employees and as many people as possible to live, work and develop sustainably and confidently in the information technology space.

Pursuing this purpose, Atos has built specific know-how and expertise to help its customers meet the challenges related to their digital transformation:

- Digitize their **customer experience** and foster **business reinvention** thinking and implementation;
- Streamline **operational excellence**;
- Guarantee **trust and compliance**.

Atos solutions and services provide agile, scalable and trusted foundations to support customers in their digital journey. They are at the heart of Atos's differentiation:

- **Industry expertise and solutions** to build future-proofed systems fitted to our clients' industries;
- **Smart data platforms and services** to help organizations unlock the value of their data today;
- **Ecosystems of multiple infrastructure solutions** to create the foundations for digital business.

Across all these solutions, platforms and infrastructures, Atos Cybersecurity enables to set up end-to-end, prescriptive security solutions to identify and block threats before they may have a substantial impact.
All these solutions and services leverage innovations from Atos's vast network of partners and from its own R&D programs, notably around eight strategic topics: modern applications and blockchain, immersive experience, artificial intelligence, automation, hybrid cloud, advance computing, edge and Internet of Things (IoT) and cybersecurity.

A.2.1 Atos expertise covers a wide range of specialties to accompany its customers for new opportunities and innovations

Infrastructure & Data Management (IDM): transforming today's IT landscapes to future hybrid IT environments

Atos is at the forefront of transforming its clients' IT infrastructures to the new world of hybrid IT landscapes and ecosystems of multiple infrastructures, from traditional data centers to the hybrid cloud, edge computing and the Internet of Things. This is built on Atos' expertise in delivering IT outsourcing for many years, strengthened by its leading hybrid cloud offering, build in partnership with large public cloud players such as Google, Microsoft, AWS and others. Atos has been recognized several times by independent analysts as a leader in hybrid cloud and as the most visionary workplace services provider in Europe thanks to its Digital Workplace offering leveraging on its unique unified communications capabilities from Unify. Atos is also ranked as a leader in European and Asia-Pacific Datacenter Outsourcing and Infrastructure Utility Services as well as a global leader in outsourcing services. Finally, Atos delivers Business Process Outsourcing (BPO) services in Medical and Financial areas.

Business & Platform Solutions (B&PS): transforming business through innovative business technologies

With its Business & Platform Solution (B&PS) Division, Atos design, build and operate vertical business services and platforms to help its clients win in today's fast-transforming digital world. In order to better answer market innovation needs, Business & Platform Solutions has, in 2018, fundamentally extended the way it conducts its business, particularly with the acquisition of Syntel, a US and Indian Leading Company in Digital and Automation. The organization focuses on global delivery with strengthened management for strategic accounts and offering development to ensure high quality standards, excel in customer satisfaction and drive operational performance.

The Atos Consulting practice is part of the Business & Platform Solutions Division and aims to transform business through innovative business technologies. As such, Atos helps its clients deliver innovation to their customers, reduce costs, and improve effectiveness by leveraging business technologies. Atos Consulting's comprehensive digital transformation solutions enable organizations to connect and collaborate both within and outside the organization much more effectively.

Big Data & Cybersecurity (BDS): a business differentiator empowering digital transformation

The Big Data & Cybersecurity (BDS) Division brings together the Big Data, Security and Mission-Critical Systems solutions and services developed in-house by the Group. This advanced expertise meets the critical challenges that our customers face in processing today's and tomorrow's gigantic volumes of data, connecting people, data and things to create business value, and fully protecting all of them. As such, the Big Data & Cybersecurity Division solidly contributes to make Atos the trusted partner of organizations which intend to leverage the benefits of the new "Economy of Data" that is growing today, notably through the development of "Artificial Intelligence" and the Internet of Things (IoT). The Division relies on R&D teams whose expertise is recognized internationally and strongly contributes to the development of Atos technology portfolio, from infrastructures to smart data platforms and industry solutions.

A.2.2 Atos industry expertise

Atos forges long-term partnerships with both large and multinational groups and small and medium size companies. Its high technological expertise and industry knowledge allow the Group to work with clients in the following sectors:

Manufacturing, Retail & Transportation

Atos helps enterprises accelerate the shift to new products and services for tomorrow's hyperconnected world. In the *manufacturing* sector, Atos helps players streamline production and supply chains, develop new services and accelerate research to create innovative solutions. In *retail, transportation & logistics,* Atos helps customers to meet the challenges presented by the digitally-empowered consumer and deploy the ubiquitous commerce and multimodal transportation solutions of the future. Across the manufacturing, retail & services sectors, Atos offers its entire solution portfolio as a hybrid cloud service and supports mobile users with advanced enterprise mobility services.

Public & Health

Atos is an active partner in improvement and technology for the *Public Sector* - central and local governments – and *defense*, as well as *healthcare and life science.* In a rapidly transforming world, Atos helps its clients invent the public and health digital platforms of the future. As an expert in powerful, secured and mission-critical systems, infrastructures and applications, Atos' products and commercial solutions also help governments and industrial players build the new defense systems and technologies of tomorrow. The Group has been involved in projects as diverse as building the largest European supercomputers for nuclear simulations, countrywide border control, battlefield and warship information systems, mobile tactical communications, intelligence and reconnaissance systems.

Financial Services

Atos supports the world's leading *financial services* organizations globally by offering solutions to improve their operational performance and develop new offerings and business models over the long term. It enables them to manage risks, ensure compliancy with changing regulations across multiple geographies, and leverage the best of Fintech Innovation. In the world of the connected customer, Atos provides the banking and insurance sectors in particular with end-to-end smart solutions to attract and engage customers across multiple channels, leveraging the power of the Internet of Things to understand and serve them more intimately and respond quicker to their needs, thereby building stronger loyalty rate and new monetization models.

Telcos, Media & Utilities

Across the *telecommunications, media, and technology, and energy and utilities* sectors, operators face the challenge of increased competition, deregulation, consolidation and disruptive technologies. Within this context, the pressure is on to establish new business models to maintain leading market positions or increase market share. By using IT to transform its clients' operations and customer relations, Atos helps businesses increase their agility while reducing costs. Atos powers progress for its clients by accelerating and securing the adoption of transformational technologies, such as data-centric approaches and 5G in telecommunications, multi-channel and interactive media delivery, and smart grid systems for energy and utilities.

B. Financials

B.1 Operational review

B.1.1 Statutory to constant scope and exchange rates reconciliation

2019 revenue was € 11,588 million, down -5.5% compared to 2018 reported statutory, -6.4% at constant exchange rates, and +1.4% at constant scope and exchange rates. Operating margin reached € 1,190 million (10.3% of revenue), -5.6% compared to 2018 reported statutory and +5.8% compared to € 1,125 million (9.8% of revenue) in 2018 at constant scope and exchange rates.

In €million	2019	2018	% change
Statutory revenue	11,588	12,258	-5.5%
Exchange rates effect		117	
Revenue at constant exchange rates	**11,588**	**12,375**	**-6.4%**
Scope effect		-982	
Exchange rates effect on acquired/disposed perimeters		37	
Revenue at constant scope and exchange rates	**11,588**	**11,430**	**1.4%**
Statutory operating margin	1,190	1,260	-5.6%
Scope effect		-154	
Exchange rates effect		19	
Operating margin at constant scope and exchange rates	**1,190**	**1,125**	**5.8%**
as % of revenue	*10.3%*	*9.8%*	

The table below presents the effects on 2018 revenue of acquisitions and disposals, internal transfers reflecting the Group's new organization, and change in exchange rates.

	FY 2018 revenue				
In € million	FY 2018 statutory	Scope effects	Internal transfers	Exchange rates effects*	FY 2018 at constant scope and exchange rates
North America	2,022	628		138	2,789
Germany	2,161	-8			2,153
France	1,710	16			1,727
UK & Ireland	1,612	44		13	1,668
Benelux & The Nordics	1,017	-1		-0	1,016
Other Business Units	2,061	13		3	2,077
Worldline	1,674	-1,674			
TOTAL GROUP	**12,258**	**-982**		**154**	**11,430**
Infrastructure & Data Management	6,328	-14	-47	96	6,362
Business & Platform Solutions	3,361	739	30	50	4,180
Big Data & Cybersecurity	895	-32	18	8	888
Worldline	1,674	-1,674			
TOTAL GROUP	**12,258**	**-982**	**0**	**154**	**11,430**

* *At FY 2019 exchange rates*

Scope effects amounted to €-982 million for revenue, of which:

- €-1,674 million related to the restatement of the contribution of Worldline to the Group revenue in FY 2018 following the deconsolidation of Worldline from the Group as of January 1, 2019. As a reminder, after having distributed 23.4% of Worldline's share capital to its shareholders on May 7, 2019, out of the 50.8% owned by the Group, Atos has completed as of October 30, 2019, the sale of c. 14.7 million Worldline shares (c. 8% of Worldline's share capital), for c. 0.8 billion euro, through a placement to qualified investors only by way of accelerated bookbuilding offering. Concurrently, Atos issued bonds due 2024 for an aggregate nominal amount of approximately €500 million, which will be exchangeable into Worldline shares (c. 4% of Worldline's share capital in case of full conversion) at a premium of 35%. In addition, Atos has agreed to transfer to Atos UK 2019 Pension Scheme c. 4.3 million Worldline shares (c. 2% of Worldline's share capital) representing £198 million (c. €230 million). Following these transactions, and in case of exchange in full of the bonds, Atos would retain a direct stake of 13% of Worldline share capital and 22% of voting rights;

- €+65 million corresponding to the revenue realized by Atos' entities with Worldline in FY 2018. This revenue is no more neutralized in the Group consolidation but recognized as Group revenue following the deconsolidation of Worldline as of January 1, 2019;

- The remaining net positive amount of €+627 million was mostly related to the acquisition of Syntel, consolidated as of November 1, 2018 (10 months restated for €+709 million), the acquisition of IDnomic, consolidated as of October 1, 2019 (3 months restated for €+5 million), the disposal of some specific Unified Communication & Collaboration activities as well as former ITO activities in the UK, and the disposal and decommissioning of non-strategic activities within CVC;

- As the closing of the recent acquisition of Maven Wave has taken place earlier in Q1 2020, no restatement is necessary for FY 2018 revenue.

Scope effects amounted to €-154 million for operating margin. Most of the impact came from the restatement of the contribution of Worldline to the Group operating margin in FY 2018 (€-293 million), the acquisition of Syntel (10 months for €+176 million) and the disposal of some specific Unified Communication & Collaboration activities, as well as former ITO activities in the UK and the disposal and decommissioning of non-strategic activities within CVC. As the operating margin realized by Atos' entities with Worldline in FY 2018 was not eliminated from a contributive standpoint, no restatement is necessary.

Internal transfers mostly referred to Healthcare contracts in North America transferred to Syntel, previously reported within Infrastructure & Data Management and now reported within Business & Platform Solutions as of January 1, 2019, as well as Cybersecurity consulting services formerly reported in Business & Platform Solutions and now integrated under Big Data & Cybersecurity.

Currency exchange rates effects mostly came from the US dollar which positively contributed to revenue for €+154 million and to operating margin for €+19 million.

The table below presents the described effects on 2018 operating margin:

	FY 2018 operating margin				
In € million	**FY 2018 statutory**	**Scope effects**	**Internal transfers**	**Exchange rates effects***	**FY 2018 at constant scope and exchange rates**
North America	202	84		15	300
Germany	137	-10			126
France	150	0			151
UK & Ireland	193	4		1	198
Benelux & The Nordics	76	-5		0	71
Other Business Units	275	66		3	344
Global structures**	-66			0	-66
Worldline	293	-293			
TOTAL GROUP	**1,260**	**-154**		**19**	**1,125**
Infrastructure & Data Management	604	-20	-3	9	589
Business & Platform Solutions	300	176	-1	9	483
Big Data & Cybersecurity	138	-17	5	2	127
Corporate costs	-74			-0	-74
Worldline	293	-293			
TOTAL GROUP	**1,260**	**-154**		**19**	**1,125**

** At FY 2019 exchange rates*

*** Global structures include the Global Divisions costs not allocated to the Group Business Units and Corporate costs*

B.1.2 Performance by Division

Revenue was € 11,588 million, +1.4% at constant scope and exchange rates, particularly led by the Cloud performance and Big Data & Cybersecurity.

Operating margin was **€ 1,190 million**, representing **10.3% of revenue**, compared to 9.8% in 2018 at constant scope and exchange rates. Each Division contributed to the operating margin increase, Infrastructure & Data Management benefitting from automation and the RACE program, Business & Platform Solutions from the cost synergies with Syntel, Big Data & Cybersecurity from the topline growth. Finally, corporate central costs were reduced thanks to continued efforts on expense optimization.

	Revenue			Operating margin		Operating margin %	
In €million	2019	2018*	Organic evolution	2019	2018*	2019	2018*
Infrastructure & Data Management	6,321	6,362	-0.6%	614	589	9.7%	9.3%
Business & Platform Solutions	4,216	4,180	0.9%	492	483	11.7%	11.6%
Big Data & Cybersecurity	1,050	888	18.3%	149	127	14.2%	14.3%
Corporate costs	-	-		- 65	- 74	-0.6%	-0.7%
Total	**11,588**	**11,430**	**1.4%**	**1,190**	**1,125**	**10.3%**	**9.8%**

** At constant scope and exchange rates*

B.1.2.1 Infrastructure & Data Management

In €million	2019	2018*	Organic evolution
Revenue	6,321	6,362	-0.6%
Operating margin	614	589	
Operating margin rate	9.7%	9.3%	

**At constant scope and exchange rates*

Infrastructure & Data Management **revenue** was € 6,321 million, down -0.6% at constant scope and exchange rates. The Division managed to turn back to growth in the third quarter 2019 and continued the positive trend, achieving +0.3% organically during the fourth quarter. In line with the transformation of the business model of the Division, revenue share increased in Digital Workplace, Codex and in projects in Technology Transformation Services. The Division continued the digital transformation of its main clients through automation and artificial intelligence, supporting growth in several geographies, notably in Asia Pacific, Central & Eastern Europe, South America, Iberia and Middle East & Africa, while Germany, the United Kingdom, France and Benelux & The Nordics faced reduced volumes.

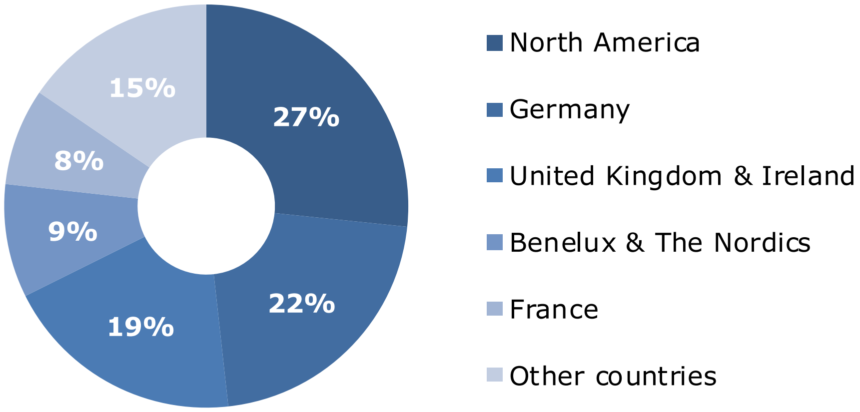
Financial Services posted a double-digit growth, mainly fueled by the ramp-up of the significant contracts in the North America, notably with CNA Financial Corporation, and in United Kingdom & Ireland with Aegon, National Savings & Investments and Aviva, which have more than compensating one large contract not renewed in 2018 in North America.

Telcos, Media & Utilities grew thanks to additional sales achieved with BBC in the United Kingdom, new logos notably with National Grid and Entergy Corporation in North America, as well as the ramp-up of the contracts with Scottish Water in the United Kingdom and with a Spanish mobile telco operator. In France, the activity was challenging with businesses not repeated in Utilities compared to Q4 last year. The Division performed a strong activity in Unified Communication & Collaboration in Benelux & The Nordics and in the Other Business Units while the situation was more challenging in Germany.

Manufacturing, Retail & Transportation slightly stepped back, facing the effects of the non-renewal of a contract with Marriott International in North America in 2018, a strong reduction of activity in Unified Communication & Collaboration in several geographies such as North America and Benelux & The Nordics, as well as volumes reduction and contract ramp downs in Germany. The Industry benefitted from the ramp-up of several contracts signed in North America during the year which partially offset the above effects.

The situation in Public sector remained challenging, in particular in the United Kingdom impacted by the base effect of transitions completed last year with the Ministry of Justice and suffered from lower volumes with a pension, insurance and investment company. North America was also impacted by contract terminations and by scope reduction. This was partially offset by the increased activity in "Other Business Units" and in France.

Infrastructure & Data Management revenue profile by geography



Operating margin in Infrastructure & Data Management was € 614 million, representing 9.7% of revenue. The increase of +40 basis points was mainly driven by strong cost saving actions including the RACE program across geographies as well as the adaptation of the Group workforce in several countries, more particularly in Germany which benefited from the effects of the acceleration of the adaptation plan launched in H1. In the United Kingdom, the operating margin was affected by price constraints in Business Process Outsourcing (BPO).

B.1.2.2 Business & Platform Solutions

In €million	2019	2018*	Organic evolution
Revenue	4,216	4,180	0.9%
Operating margin	492	483	
Operating margin rate	11.7%	11.6%	

**At constant scope and exchange rates*

Business & Platform Solutions **revenue** reached € 4,216 million, +0.9% at constant scope and exchange rates in 2019. The activity was contrasted over the year, with a first semester at +2.3% organic growth while the Division was slightly down at -0.5% over the second semester. Indeed, Business & Platform Solutions faced with tensions in financial services in North America both in Q3 and in Q4. The reduction of the number of low margin contracts implemented in H1 2019 at the time of the transfer of contracts under Syntel management impacted the revenue organic growth both in Q3 and Q4. Finally, towards the end of the year, growth was impacted by a slowdown in the Automotive industry in Germany.

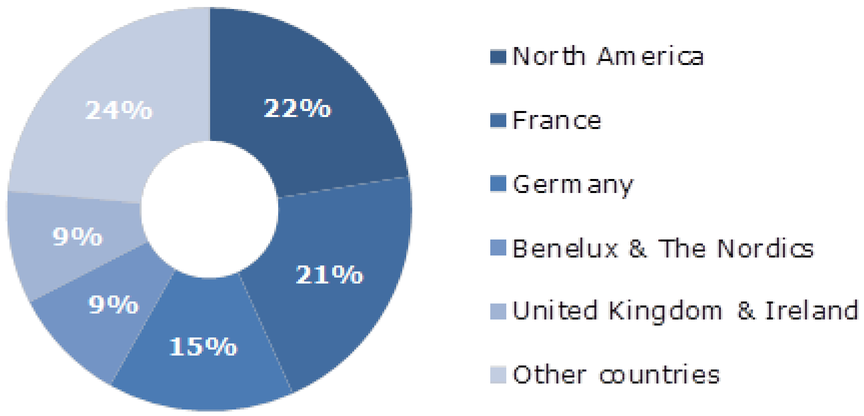
Growth was strong in Manufacturing, Retail & Transportation, which benefitted from good performance in almost all geographies. In particular Germany recorded a solid growth thanks to new application management services contract with Siemens combined with S4HANA engagement in Austria, ramp-up of contracts such as Philips in Benelux & The Nordics, as well as increased volumes in the United Kingdom.

Financial Services slightly grew mainly thanks to a contract with a large insurance company in the United Kingdom as well as cloud business with an insurance company in Benelux & The Nordics and ramp-up of contracts in Germany, while the situation remained challenging in France and in North America impacted by volume reductions.

The Division posted a slight decrease organically in Telcos, Media & Utilities. Germany was impacted by the ramp-down with one large customer in application management while Benelux & The Nordics and North America suffered from lower volumes in application management contracts. This challenging situation could not be compensated by higher volumes with Italian and Spanish utilities while France benefitted from higher activity through Worldgrid contracts and United Kingdom recorded a growth thanks to ramp-up of several contracts.

The situation was more contrasted in Public & Health which performed an increased activity for digital projects in France as well as new contracts in Italy and in Iberia. Conversely, it faced with volume reduction in healthcare in North America due to not repeated migrations delivered last year to hospitals as well as project completions in the United Kingdom.

Business & Platform Solutions revenue profile by geography



Operating margin was € 492 million, representing 11.7% of revenue, an improvement of +10 basis points. Syntel synergies contributed positively to the Division margin improvement at the level expected. Operating margin improvement achieved in the first semester slowed down in the second half, due to the slow-down of the revenue organic growth of the Division, the ramp down in Germany of a high margin application management contract with one large customer, as well as some cost overruns in Atos legacy contracts.

B.1.2.3 Big Data & Cybersecurity

In € million	**2019**	**2018***	**Organic evolution**
Revenue	1,050	888	18.3%
Operating margin	149	127	
Operating margin rate	14.2%	14.3%	

**At constant scope and exchange rates*

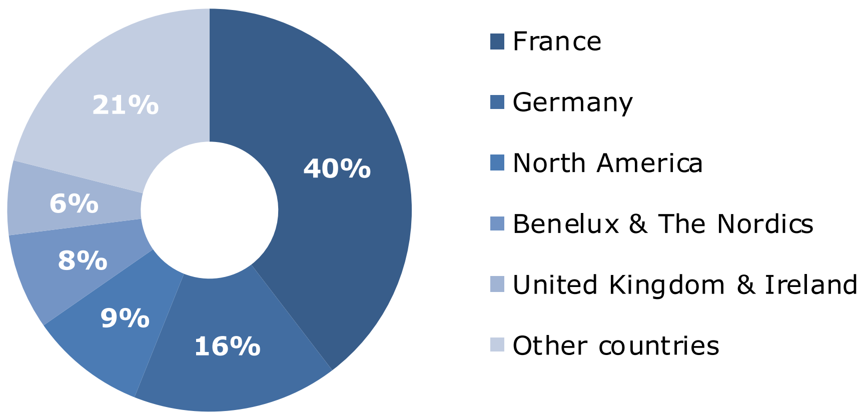
Revenue in Big Data & Cybersecurity was € 1,050 million, up +18.3% organically, maintaining a strong performance all over the year and pursuing the extension of the Division's markets both in terms of industries served and geographies.

In particular, growth was notably sustained by Big Data activity, mainly coming from ramp up of large contracts in France like Météo-France, a French research institute and a French Ministry, in Germany with HRLN Supercomputing Service and Forschungszentrum Jülich, in the United Kingdom with the European Centre for Medium Range Weather Forecast, and in Benelux & the Nordics with notably CSC in Finland. It largely compensated for the non-repeated high level of product sales performed last year in North America.

Cybersecurity activities also posted a positive growth led by new business opportunities in North America combined with good performance in Benelux & the Nordics which largely offset revenue from licenses not repeated this year in the United Kingdom.

The performance was also driven by strong activity of Mission critical systems in Central and Eastern Europe.

Big Data & Cybersecurity revenue profile by geography



Operating margin was € 149 million, representing 14.2% of revenue broadly stable compared to 2018. All in all, the Division generated a solid profitability from operations while continuing to invest in Research & Development and commercial investment on offerings in both Cybersecurity and Big Data solutions. Operating margin was high in growing geographies such as France, Benelux & The Nordics and Other Business Units, while North America benefited from a favorable revenue mix.

B.1.3 Performance by Business Unit

In € million	Revenue			Operating margin		Operating margin %	
	2019	2018*	Organic evolution	2019	2018*	2019	2018*
North America	2,725	2,789	-2.3%	343	300	12.6%	10.8%
Germany	2,167	2,153	0.7%	152	126	7.0%	5.9%
France	1,788	1,727	3.5%	164	151	9.2%	8.7%
United Kingdom & Ireland	1,669	1,668	0.0%	165	198	9.9%	11.9%
Benelux & The Nordics	1,047	1,016	3.0%	88	71	8.4%	7.0%
Other Business Units	2,192	2,077	5.6%	319	344	14.6%	16.5%
Global structures**	-	-		- 42	- 66	-0.4%	-0.6%
Total	**11,588**	**11,430**	**1.4%**	**1,190**	**1,125**	**10.3%**	**9.8%**

** At constant scope and exchange rates*

*** Global structures include the IT Services Divisions global costs not allocated to the Business Units and Corporate costs.*

B.1.3.1 North America

In € million	2019	2018*	Organic evolution
Revenue	2,725	2,789	-2.3%
Operating margin	343	300	
Operating margin rate	12.6%	10.8%	

**At constant scope and exchange rates*

Revenue reached € 2,725 million, decreasing by -2.3% organically. After a challenging situation in the first half 2019 when the performance was hampered by the base effect of two contracts terminated in 2018, the business unit managed to turn back to growth, posting a robust +2.7% in the last quarter of 2019.

As a result of the implementation of a sales reorganization and the change or removal of most of the client executives the last eighteen months, Infrastructure & Data Management stabilized revenue organically, fueled by new logo and ramp up of existing contracts which compensated the remaining impact of terminated contracts. Financial Services recorded a good performance driven from the ramp-up of the contract with CNA Financial Corporation, which more than compensated for an important legacy contract not renewed last year. Telcos, Media & Utilities market showed a sustained activity as well, attributable to new logos notably with a large integrated energy company. Public & Health sector benefitted from higher volumes with Texas Department of Information Resource, but was impacted by less revenue further to migrations as well as a ramp-down with a leader in healthcare IT. Within Manufacturing, Retail & Transportation, new business achieved with several new customers of large contracts could not offset the negative effect from the terminated contract with Marriott International in 2018 and lower volumes with some clients.

Business & Platform Solutions decreased compared to last year. The situation remained challenging in Healthcare area due to the end of large software roll out to hospitals, even if the decline was significantly reduced in the last quarter. Financial Services sector was impacted by less volumes and a lower demand as some customers in the banking area reduced expenses in H2. Manufacturing, Retail & Transportation was broadly stable.

Big Data & Cybersecurity reached a good performance in Financial Services and Telcos, Media & Utilities, driven notably by new business opportunities with CNA Financial Corporation. However, this was not sufficient to compensate for the non-repeated high level of product sales performed last year in Public & Health and in Manufacturing, Retail & Transportation, despite new business achieved in Q4.

Operating margin reached € 343 million, representing 12.6% of revenue, increasing by +180 basis points compared to last year. All Divisions reported a double digit level of profitability. In Business & Platform Solutions, the Business Unit increased its operating margin rate thanks to the contribution from Syntel, including the effect of synergies. In addition, Infrastructure & Data Management contributed as well on the improvement of the operating margin rate due to workforce optimization initiatives and strong cost reduction actions. Profitability also increased in Big Data & Cybersecurity, which benefited from new logos in Q4.

B.1.3.2 Germany

In € million	2019	2018*	Organic evolution
Revenue	2,167	2,153	0.7%
Operating margin	152	126	
Operating margin rate	7.0%	5.9%	

** At constant scope and exchange rates*

In 2019, the Business Unit achieved an organic growth of +0.7% compared to the same period last year at constant scope and exchange rates, leading to € 2,167 million **revenue**. Growth derived from the good performance in Big Data & Cybersecurity and Business & Platform Solutions, while the situation of Infrastructure & Data Management remained challenging.

Infrastructure & Data Management decreased organically compared to last year. In this Division, Public & Health market was stable. Manufacturing, Retail & Transportation and Telcos, Media & Utilities were both impacted by one off sales achieved last year and not repeated this year, even though partially offset by increased activities with Karstadt and Bayer within Manufacturing, Retail & Transportation. Financial Services faced with contract terminations also partially compensated by new business with Deutsche Bundesbank.

Business & Platform Solutions revenue increased compared to last year, but slowed down in the second semester after a solid growth reported in the first half. Manufacturing, Retail & Transportation drove the Division growth thanks to a new application management services with Siemens and a new logo wins. Public & Health also grew thanks to new services notably with a government institution in information technologies and Autobahn, which offset scope reduction with Bundesagentur fur Arbeit. Financial Services also recorded a positive performance. This largely compensated for the ramp down of the contract with a large customer in application management which impacted Telcos, Media & Utilities.

Big Data & Cybersecurity achieved a particularly strong growth, accelerating in the second semester, notably benefitted from high performance computing sale with HRLN Supercomputing Service and Forschungszentrum Jülich within Public & Health sector and finally Bullion sales within Telcos, Media & Utilities sector.

Operating margin reached € 152 million, representing 7.0% of revenue, +120 basis points compared to 2018 at constant scope and exchange rates. Profitability improved significantly due to refocusing of Unified Communication activities in Infrastructure & Data Management and to restructuring efforts combined with strong actions on the cost base. This over compensating the performance in Business & Platform Solutions notably caused by ended contract with a telecommunication provider.

B.1.3.3 France

In € million	2019	2018*	Organic evolution
Revenue	1,788	1,727	3.5%
Operating margin	164	151	
Operating margin rate	9.2%	8.7%	

** At constant scope and exchange rates*

At € 1,788 million, **revenue** improved by +3.5% organically. The performance of the Business Unit was driven by Big Data & Cybersecurity thanks to a continued solid performance over the year.

Infrastructure & Data Management decreased organically. Growth was posted mainly in Financial Services notably coming from higher volumes within banking sector through hybrid cloud activities. Public & Health also contributed positively to the growth benefitting from higher volumes and increasing hybrid cloud business, partly offset by several ramp-down contracts. However, this was not enough to compensate for Telcos, Media & Utilities and Manufacturing, Retail & Transportation sectors notably impacted by lower volumes with a global electricity company as well as some contracts which ended.

Business & Platform Solutions revenue grew in 2019 primarily driven by Public & Health with new business notably with a large pension institution coupled with higher volumes with a public institution of labour. Telcos, Media & Utilities showed a sustained activity as well, attributable to the ramp-up of a contract with large Group of energy through Worldgrid activities. Conversely, in Manufacturing, Retail & Transportation sector, the ramp-up contracts with a large Hotel Group in Digital workplace and with a large car manufacturer was not sufficient to compensate for the ending contract in the pharmaceutical segment. The Business Unit was also affected by an underperformance in Financial Services.

Big Data & Cybersecurity achieved double-digit growth benefitting from the strong performance largely concentrated in Public & Health, thanks to new contracts through High Performance Computer with Météo-France and a French research institution, as well as the renewal of software and hardware licenses contract with French institutions. To a lesser extent, Manufacturing, Retail & Transformation also contributed positively to the growth, benefitting from the ramp-up of several High Performance Computer contracts with international clients. Finally, Telcos, Media & Utilities market was affected by the comparison base with High Performance Computer delivery, successfully achieved in 2018 with a large national energy provider last year.

Operating margin reached € 164 million, representing 9.2% of revenue, +50 basis points at constant scope and exchange rates. The improvement of operating margin was largely attributable to Big Data & Cybersecurity, supported by strong revenue growth. Conversely, in Infrastructure & Data Management, actions on costs and on productivity started to result in the second semester but was not sufficient to compensate for the challenging situation faced in the first semester. Business & Platform Solutions operating margin slightly decreased compared with previous year.

B.1.3.4 United Kingdom & Ireland

In € million	2019	2018*	Organic evolution
Revenue	1,669	1,668	0.0%
Operating margin	165	198	
Operating margin rate	9.9%	11.9%	

** At constant scope and exchange rates*

Revenue was € 1,669 million, stable organically. Strong business growth in Big Data & Cybersecurity and dynamism of Business & Platform Solutions were hampered by more challenging situation in Infrastructure & Data Management.

Infrastructure & Data Management decreased compared to last year. Financial Services posted a strong growth, notably thanks to the ramp-up of Aegon contract and increased revenue with National Savings & Investments and Aviva. Telcos, Media & Utilities market was mainly driven by additional sales achieved with BBC and the ramp-up of the hybrid cloud contract with a large water provider. Manufacturing, Retail & Transportation increased slightly, thanks to the hybrid cloud deliveries on contract extension and transformation projects with a UK postal service company. This could not fully offset the decline in Public Sector impacted by the base effect from transition completion of Ministry of Justice and from lower volumes with a pension, insurance and investment company.

Business & Platform Solutions grew organically. In Financial Services, the performance was supported by the ramp-up of Aegon contract signed at the end of previous year and increased business within Clydesdale Bank and Standard Life Investment. Within Manufacturing, Retail & Transportation market, growth was essentially derived from increased projects with Federal Express Corporation, a customer provided by Syntel. Telcos, Media & Utilities benefitted from contracts ramp-up with a large water provider and Northern Ireland Electricity, while Public & Health faced with end of projects.

Revenue in Big Data & Cybersecurity showed a strong momentum, with a very significant organic growth led by new HPC contract with the European Centre for Medium Range Weather Forecast in Public and Health market, despite the base effect of cyber services sales achieved the year before with International Airlines Group.

Operating margin was € 165 million and represented 9.9% of the revenue, or -200 basis points compared to last year at constant scope and exchange rate. While the profitability increased in Business & Platform Solutions benefitting from revenue growth, improved operational efficiency and cost control. It did not compensate Infrastructure & Data Management impacted by revenue decrease.

B.1.3.5 Benelux & The Nordics

In € million	2019	2018*	Organic evolution
Revenue	1,047	1,016	3.0%
Operating margin	88	71	
Operating margin rate	8.4%	7.0%	

**At constant scope and exchange rates*

At € 1,047 million, **revenue** was up by +3.0% organically, driven by a strong activity in Big Data & Cybersecurity.

Infrastructure & Data Management slightly decreased. In Telcos, Media & Utilities, the Division achieved a strong growth through UCC activities and thanks to a new contract signed in 2019 with T-Mobile. Public & Health sector recorded growth thanks to the ramp-up of the contract signed with Dutch University Hospitals. Financial Services benefitted from ramp-up of several contracts partly offset by volume reductions with an Insurance company and Kas Bank. Conversely, Manufacturing, Retail & Transportation sector was affected by the base effect on activities achieved last year within Siemens Windpower in The Nordics, partly compensated by the recently signed extended Philips contract coupled with higher volumes achieved with Philip Morris International.

Business & Platform Solutions showed a growth recovery. In particular, Manufacturing, Retail & Transportation posted a solid growth fueled by the ramp-up contract with Philips and in Financial Services from higher volumes with a Dutch insurer. The situation was more challenging in other sectors: within Public & Health the new business with a Dutch Ministry was not enough to compensate for the decline from an ended contract with another Public Institution while Telcos, Media & Utilities faced with the decline of the contract with KPN.

Big Data & Cybersecurity recorded a strong organic growth, primarily driven by a sustained demand through HPC area with CSC in Finland coupled with the Norway's National Research and Education Network, as well as higher product sales notably with a large IT Group in Belgium. Additionally, the Division benefitted from a good performance in several countries such as Poland, Sweden or Denmark.

Operating margin reached € 88 million, representing 8.4% of revenue, an improvement of +140 basis points compared to last year at constant scope and exchange rates. The profitability increased in Big Data & Cybersecurity and Business & Platform Solutions driven by improved revenue mix combined with increased operational efficiency through continued tight project management and strong actions to optimize the cost base through the RACE project. Infrastructure & Data Management margin decreased but remained at a high level of profitability.

B.1.3.6 Other Business Units

In €million	2019	2018*	Organic evolution
Revenue	2,192	2,077	5.6%
Operating margin	319	344	
Operating margin rate	14.6%	16.5%	

** At constant scope and exchange rates*

Revenue in "Other Business Units" reached € 2,192 million, up +5.6% organically, growing in all Divisions and especially in Infrastructure & Data Management and Business & Platform Solutions.

Infrastructure & Data Management delivered a strong performance. Public Sector posted a double-digit growth, thanks notably to the ramp-up of projects with the Western Australian Department of Health, alongside with the sales achieved in Central & Eastern Europe. Telcos, Media & Utilities expanded as well, driven mainly by a new cloud contract with a Spanish mobile telco operator signed in March and by the ramp-up of a global contract with an international consulting firm in Asia Pacific. Financial Services benefitted from increased business with a large private bank in Morocco and from the ramp-up of a digital Workplace contract with a large insurance company in Italy. The situation was more challenging in Manufacturing, Retail & Transportation.

Business & Platform Solutions grew in all markets. Public & Health was fueled by a new contract with a Public Education Institution in Spain, ramp-up of Olympics Tokyo 2020 and Beijing 2022 as well as increased business with governmental institutions in Central & Eastern Europe. Telcos, Media & Utilities market benefitted from higher volumes, notably with Italian and Austrian clients and new projects in Middle East & Africa. Growth in Manufacturing, Retail & Transportation was essentially driven by the ramp-up of new contracts in Central & Eastern Europe. Finally, new wins in banking sector within Financial Services in South America fully compensated for ramp-downs in Iberia and volume reductions in Italy.

Big Data & Cybersecurity benefitted from HPC deliveries in Asia Pacific and Middle East & Africa, coupled with higher project activity within Cybersecurity services in Central & Eastern Europe.

Operating margin was € 319 million, representing 14.6% of revenue. Infrastructure & Data Management as well as Big Data & Cybersecurity managed to improve their profitability. Conversely, the situation was more challenging for some contracts in India in Business & Platform Solutions.

B.1.3.7 Global structure costs

Global structures costs reached €-42 million, decreasing by € 24 million compared to 2018 at constant scope and exchange rates, primarily driven by the continued efforts on internal costs optimization in most of the support functions as well as on subcontracting costs with third parties. A positive impact came as anticipated from pension as a result of the implementation of the "Loi Pacte" for the Group.

B.1.4 Revenue by Market

In €million	2019	2018*	Organic evolution
Manufacturing, Retail & Transportation	4,139	4,181	-1.0%
Public & Health	3,411	3,387	0.7%
Financial Services	2,169	2,032	6.8%
Telcos, Media & Utilities	1,869	1,831	2.1%
Total	**11,588**	**11,430**	**1.4%**

** At constant scope and exchange rates*

B.1.4.1 Manufacturing, Retail & Transportation

Manufacturing, Retail & Transportation was the largest market segment of the Group (36%) and reached € 4,139 million in 2019, declining by -1.0% compared to 2018 at constant scope and exchange rates. Good performance was recorded in Germany within Business & Platform Solutions Division compensating ramp down on some contracts in North America during the first half of the year for Infrastructure & Data Management Division.

In this market, the top 10 clients (excluding Siemens) represented 20% of revenue with a leading North American logistics company, Conduent, Triple Five, Daimler Group, Bayer, a global leader in Aerospace & Defense, Johnson & Johnson, Rheinmetall, Philips and Volkswagen.

B.1.4.2 Public & Health

Public & Health was the second market of the Group (29%) with total revenue of € 3,411 million, up +0.7% compared to 2018 at constant scope and exchange rates. Revenue increase mainly came from France within Big Data & Cybersecurity Division.

34% of the revenue in this market was realized with 10 main clients: Texas Department of Information Resources, UK Department for Work & Pensions (DWP), European Union Institutions, McLaren Health Care Corporation, a leader in healthcare IT, UK Nuclear Decommissioning Authority, a French research institute, a French Ministry, the UK Ministry of Justice and SNCF (France).

B.1.4.3 Financial Services

Financial Services was the third Market of the Group and represented 19% of the total revenue at € 2,169 million, an increase of +6.8% compared to 2018 at constant scope and exchange rates. A good performance was recorded in the United Kingdom thanks to Aegon, National Savings & Investments and Aviva. The market was also benefiting from contract ramp-up with CNA Financial Corporation in North America.

In this market, 49% of the revenue was generated with the 10 main clients: UK National Savings & Investments, a UK bank based in Hong-Kong, a US financial payment institution, CNA Financial Corporation, State Street Corporation, Deutsche Bank, Aegon, a Dutch Insurance company, Aviva and BNP Paribas.

B.1.4.4 Telcos, Media & Utilities

Telcos, Media & Utilities represented 16% of the Group revenue and reached € 1,869 million, representing an increase of +2.1% compared to 2018 at constant scope and exchange rates. Revenue increase was mainly coming from Other Business Units with a new cloud contract with a Spanish mobile telco operator, the United Kingdom increasing activities with BBC and Scottish Water, and in North America thanks to a large utilities provider.

Main clients were EDF, Orange, BBC, Telefonica/O2, a large US entertainment company, Worldline, Enel, Deutsche Telekom, Telecom Italia and a large Nordic telecommunication provider. The top 10 main clients represented 50% of the total Telcos, Media & Utilities Market revenue.

B.1.5 Portfolio

B.1.5.1 Order entry and book to bill

In 2019, the Group **order entry** totaled **€ 12,245 million**, increasing by 3.9% **year-on-year** excluding Worldline, representing a **book to bill ratio** of **106%** compared to 111% in 2018 (excluding Worldline). Indeed, the performance remained strong in 2019 in a year with much less contracts coming for renewal in the Infrastructure & Data Management Division. During the fourth quarter, the Group reported strong performance with a book to bill at 121%.

Order entry and book to bill by **Division** was as follows:

	Order entry			Book to bill		
In €million	H1 2019	H2 2019	FY 2019	H1 2019	H2 2019	FY 2019
Infrastructure & Data Management	2,867	3,341	6,208	91%	105%	98%
Business & Platform Solutions	2,228	2,446	4,674	104%	117%	111%
Big Data & Cybersecurity	647	716	1,363	137%	124%	130%
Total	**5,742**	**6,503**	**12,245**	**100%**	**111%**	**106%**

Several large new contracts were signed over the period in Infrastructure & Data Management, which contributed to growth in Hybrid Cloud and Digital Workplace. In particular, large order entries were contracted in North America with a leading healthcare company, with National Grid in North America and also in the United Kingdom & Ireland, the NG911 contract with the State of California, and with Entergy. In addition, Germany closed several major deals notably with BASF and Itergo, whereas Benelux & The Nordics concluded a large contract in the Public & Health sector. Business & Platform Solutions signed new contracts notably in Benelux & The Nordics such as Fortum within Manufacturing, Retail & Transportation and a Dutch insurance company within Financial Services. Big Data & Cybersecurity pursued its strong commercial dynamics, fueled by a large win in the United Kingdom with the European Centre for Medium-Range Weather Forecast and in France with Méteo France as well as in Germany with Bayer.

Renewals of the year included several large contracts in Infrastructure & Data Management such as in Manufacturing, Retail & Transport in France with PWC, in Telcos, Media & Utilities in the United Kingdom with BBC and in Financial Services in Benelux & The Nordics with Dutch insurance company and in France with BNP Paribas. In addition, a large deal was renewed with a large UK postal company including offerings of both Infrastructure & Data Management and Big Data & Cybersecurity. Other major wins of the period were concluded within Public sector in France contributing to the order entries in Big Data & Cybersecurity and Business & Platform Solutions, coupled with a deal in Financial Services in the United Kingdom within Business & Platform Solutions.

Order entry and book to bill by **Market** were as follows, with a strong contribution from Manufacturing, Retail & Transport:

	Order entry			Book to bill		
In €million	H1 2019	H2 2019	FY 2019	H1 2019	H2 2019	FY 2019
Manufacturing, Retail & Transportation	2,132	2,554	4,686	103%	123%	113%
Public & Health	1,663	1,918	3,581	99%	111%	105%
Telcos, Media & Utilities	1,068	959	2,027	119%	99%	108%
Financial Services	879	1,072	1,951	80%	100%	90%
Total	**5,742**	**6,503**	**12,245**	**100%**	**111%**	**106%**

B.1.5.2 Full backlog

In line with the positive evolution of Atos commercial activity, the **full backlog** at the end of December 2019 increased by **+2.5%** compared to December 2018 (excluding Worldline contribution in 2018), and amounted to **€ 21.9 billion** representing **1.9 year of revenue**.

B.1.5.3 Full qualified pipeline

The **full qualified pipeline** remained strong at **€ 7.4 billion** at the end of 2019, up **+7.5%** compared to the end of 2018 (excluding Worldline contribution in 2018), representing **8 months of revenue**.

B.1.6 Human Resources

The total headcount was 108,317 at the end of December 2019, compared to 122,110 at the end of December 2018 which included Worldline staff. The evolution was strongly impacted by -11,514 headcounts scope impact mostly related to the deconsolidation of Worldline. Excluding the scope effect, the total decrease amounted to -1.9% mainly in Business & Platform Solutions and Infrastructure & Data Management to anticipate and accompany automation and robotization while the Group continued to recruit profiles to support its client in their digital transformation. In Big Data & Cybersecurity, direct staff increased by +6.4% during the year excluding the scope effect, supporting the strong growth of both in Cybersecurity/Mission Criticals and in Big Data.

In 2019, the Group hired 18,516 staff (94% were direct employees). The hirings were mainly achieved in near and offshore countries (totaling 66% of direct hirings) such as India, Poland, Romania and the Philippines, as well as in the United Kingdom, the United States and France to design and develop to new offerings, to fulfill new contracts and to compensate attrition. 55% of the direct hirings over the period were performed in Business & Platform Solutions where the attrition is above the two other Divisions.

Attrition rate was 15.1% at Group level, stable compared to previous year, of which 20.6% in offshore countries. The number of restructured and dismissed employees over the period amounted to 3,983.

Headcount evolution in 2019 by Business Unit and by Division was the following:

	End of December 2018	Scope	Hiring	Leavers, dismissals & restructuring	End of December 2019
Infrastructure & Data Management	44,530	-93	7,035	-7,834	43,638
Business & Platform Solutions	52,954	41	9,573	-11,948	50,619
Big Data & Cybersecurity	5,186	-28	777	-447	5,489
Functions	156		1	3	160
Worldline	10,452	-10,452	0	0	0
Total Direct	**113,278**	**-10,532**	**17,386**	**-20,226**	**99,906**
Germany	8,503	23	224	-402	8,348
North America	11,127	-10	1,802	-2,966	9,953
France	10,606	51	1,195	-1,360	10,493
United Kingdom & Ireland	8,485	-81	2,175	-1,667	8,912
Benelux & The Nordics	5,235	0	382	-822	4,795
Other Business Units	58,316	-63	11,535	-12,959	56,829
Global structures	554	0	73	-50	577
Worldline	10,452	-10,452	0	0	0
Total Direct	**113,278**	**-10,532**	**17,386**	**-20,226**	**99,906**
Total Indirect	**8,832**	**-982**	**1,130**	**-569**	**8,411**
TOTAL GROUP	**122,110**	**-11,514**	**18,516**	**-20,795**	**108,317**

The number of direct employees at the end of 2019 was 99,906, representing 92.2% of the total Group headcount. Indirect staff representing SG&A was 8,411 end of December 2019.

B.2 2020 objectives

In 2020, the Group targets the following objectives for its 3 key financial criteria:

- **Revenue**: c. +2% organic growth
- **Operating margin rate**: +20bps to +40bps vs 2019
- **Free cash flow**: c. € 700 million

B.3 Financial review

Worldline operations in 2019

Following the decision made on January 29, 2019 by Atos Board of Directors to submit to Annual General Meeting the project to distribute 23.5% of Worldline total shares to Atos shareholders and the approval of the transaction by Atos shareholders at the Annual General Meeting on April 30, 2019, this distribution of Worldline shares took effect on May 7, 2019, the payment date for the stock dividend. Thus, in accordance with IFRS 5, Worldline's results up to April 30, 2019 (instead of May 7, 2019 for practical reasons) have been reclassified to "Net income from discontinued operation". The gain resulting from this transaction was recognized in the consolidated income statement in "Net income from discontinued operation" (see in note 1 – Changes in the scope of consolidation).

Worldline 2018 contributions to the Group income statement and cash flow were restated accordingly.

In addition, Atos has disposed in November 2019 part of its remaining Worldline shares and issued an exchangeable bond as follows:

- Sale of 14.7 million of Worldline shares through an Accelerated Bookbuilding Offering (ABO);
- Transfer of £ 198 million (€ 230 million) of Worldline shares to Atos UK Pension Scheme in exchange of no additional funding in cash of this scheme for the next 15 years, and
- Issuance of a 5-year € 500 million bond which will be exchangeable into Worldline shares (Optional Exchangeable Bond) (OEB).

B.3.1 Income statement

The Group reported a net income from continuing operations (attributable to owners of the parent) of € 414 million for 2019, which represented 3.6% of Group revenue. Net income from continuing operations was impacted by several one-off items such as the Worldline shares transactions in November 2019, adaptation restructuring plan in Germany, and implementation costs to generate Syntel synergies as detailed below.

The normalized net income before unusual, abnormal and infrequent items (net of tax) for the period was € 834 million, representing 7.2% of 2019 Group revenue.

The net income from discontinued operation is resulting from the distribution of Worldline shares in May 2019 as described above.

(In € million)	**12 months ended December 31,2019**	**%**	**12 months ended December 31,2018***	**%**
Continuing operations				
Operating margin	**1,190**	**10.3%**	**967**	**9.1%**
Other operating income/(expenses)	-530		-337	
Operating income	**660**	**5.7%**	**630**	**5.9%**
Net financial income/(expenses)	-208		-67	
Tax charge	-82		-1	
Non-controlling interests	-3		-4	
Share of net profit/(loss) of associates	47		2	
Net income from continuing operations – Attributable to owners of the parent	**414**	**3.6%**	**560**	**5.3%**
Normalized net income from continuing operations – Attributable to owners of the parent **	**834**	**7.2%**	**803**	**7.5%**
Discontinued operation				
Net income from discontinued operation – Attributable to owners of the parent	**2,986**		**70**	

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

*** The normalized net income is defined hereafter*

B.3.1.1 Operating margin

Income and expenses are presented in the Consolidated Income Statement by nature to reflect the specificities of the Group's business more accurately. Below the line item presenting revenues, ordinary operating expenses are broken down into staff expenses and other operating expenses.

These two items together are deducted from revenues to obtain operating margin, one of the main Group business performance indicators.

Operating margin represents the underlying operational performance of the on-going business and is analyzed in detail in the operational review.

B.3.1.2 Other operating income and expenses

Other operating income and expenses relate to income and expenses that are unusual, abnormal and infrequent and represented a net expense of € 530 million in 2019. The following table presents this amount by nature:

(In €million)	**12 months ended December 31,2019**	**12 months ended December 31,2018***
Staff reorganization	-100	-76
Rationalization and associated costs	-34	-34
Integration and acquisition costs	-41	-44
Amortization of intangible assets (PPA from acquisitions)	-157	-107
Equity based compensation	-73	-36
Other items	-125	-40
Total	**-530**	**-337**

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

The € 100 million **staff reorganization** expense was mainly the consequence of the adaptation of the Group workforce in several countries. The increase in 2019 came mostly from the specific plan in Germany.

The € 34 million **rationalization and associated costs** primarily resulted from the closure of office premises and data centers consolidation, mainly in North America and France.

Integration and acquisition costs at € 41 million mainly relate to the integration costs of Syntel to generate synergies while the other costs relate to the migration and standardization of internal IT platforms from earlier acquisitions.

The 2019 amortization of intangible assets recognized in the **Purchase Price Allocation** (PPA) of € 157 million was mainly composed of:

- € 67 million of Syntel customer relationships and technologies amortized over 12 years starting November 1, 2018;
- € 22 million of SIS customer relationships amortized over 12 years starting July 1, 2011;
- € 20 million of Xerox ITO customer relationships amortized over 6 to 12 years starting July 1, 2015;
- € 17 million of Unify customer relationships and technologies amortized over 2 to 10 years starting February 1, 2016;
- € 16 million of Bull customer relationships and patents amortized over respectively 9 years and 7 to 10 years starting September 1, 2014.

In 2019, the amount of amortization of intangible assets increased from € 107 million to € 157 million, mainly due to the amortization in a full year basis of the Syntel Purchase Price Allocation (€ 67 million in 2019 to be compared with € 11 million over 2 months in 2018).

The **equity-based compensation** expense amounted to € 73 million compared to € 36 million in 2018 which reflected the lower performance and the decrease in the number of shares granted in 2018.

In 2019, **other items** increased significantly from € 40 million to € 125 million including exceptional expenses:

- At the time of the distribution of Worldline shares in May, the remaining Worldline shares were valued at the opening price on May 7, 2019 for € 54.7. Since that date, the Worldline participation was accounted for under equity method. The transactions made in November were at € 53.0 per share leading to a loss in the Group consolidated accounts as follows:
  - **Accelerated Book building Offering of Worldline shares (ABO)**. The Accelerated Book building Offering of Worldline shares on the market led to a net loss on disposal of € 46 million, net of costs, in the consolidated income statement. The transaction generated a net gain in the statutory accounts of Atos SE;
  - **Transfer of £ 198 million (€ 230 million) of Worldline shares to Atos UK Pension Scheme.** Atos has decided to fund its UK Pensions schemes with Worldline shares. This non-cash transaction will prevent Atos from any additional funding in cash for the next 15 years. This transaction led to a net loss on disposal of shares of € 7 million, in the consolidated income statement. The transaction generated a net gain in the statutory accounts of Atos SE.
- Settlement signed over H2 2019 with a large German customer led to the recognition of a one-time charge of € 23 million.

B.3.1.3 Net financial expense

Net financial expense amounted to € 208 million for the period (compared to € 67 million prior year) and was composed of a net cost of financial debt of € 64 million and non-operational financial costs of € 144 million.

Net cost of financial debt was € 64 million (compared to € 30 million in 2018) and resulted from the following elements:

- the average gross borrowing of € 5,413 million compared to € 3,330 million in 2018 bearing an average expense rate of 1.55% compared to 1.25% last year. The average gross borrowing expenses were mainly explained by:
  - the used portion of the syndicated loan combined with the Negotiable European Commercial Papers (NEU CP) and the Negotiable European Medium-Term Note program (NEU MTN) for an average of € 1,478 million (compared to an average of € 1,239 million in 2018) bearing an effective interest rate of 0.21%, benefiting from the attractive remuneration applied to the NEU CP;
  - a € 600 million bond issued in July 2015 bearing a coupon rate of 2.375%;
  - a € 300 million bond issued in October 2016 bearing a coupon rate of 1.444%;
  - a € 700 million bond issued in November 2018 bearing a coupon rate of 0.750%;
  - a € 750 million bond issued in November 2018 bearing a coupon rate of 1.750%;
  - a € 350 million bond issued in November 2018 bearing a coupon rate of 2.500%;

  - a $ 1,900 million 3 and 5-year term loan signed in October 2018 drawn in USD and EUR at variable rate, fully repaid on November 2019 bearing an average effective interest rate of 2.59%; Outstanding balances before repayment was $ 1,045 million and € 513 million;
  - other sources of financing, including securitization, for an average of € 50 million, bearing an effective interest rate of 3.12%.
- the average gross cash varied from € 1,313 million in 2018 to € 1,441 million in 2019 bearing an average income rate of 1.58% compared to 0.80% in 2018.

Non-operational financial costs amounted to € 144 million compared to € 36 million in 2018 and were mainly composed of:

- variance for € 54 million related to the OEB derivative at fair value driven by the Worldline share price evolution between the issuance in November and December 31, 2019 (as per IFRS 9) while the underlying Worldline shares were accounted for under equity method (as per IAS 28);
- pension related interest (broadly stable compared to € 27 million expense in 2018). The pension financial cost represented the difference between interest costs on pension obligations and interest income on plan assets;
- lease liability interest of € 27 million following IFRS 16;
- net foreign exchange loss (including hedges) of € 4 million versus a net foreign exchange gain (including hedges) of € 4 million in 2018.

B.3.1.4 Corporate tax

The tax charge for 2019 was € 82 million with a profit before tax from continuing operations of € 452 million. The Effective Tax Rate (ETR) was 18.2% compared to 16.2% in 2018 (excluding the recognition of deferred tax assets inherited from Bull acquisition (€ 90 million)). This increase related mostly to the integration in the Group scope of Syntel, which has a higher ETR than average. This effect was similar to the effect that Worldline used to have on Group ETR when it was consolidated as part of the continuing operations. Therefore, the Group ETR remained stable compared to the situation before Worldline deconsolidation and Syntel acquisition.

B.3.1.5 Non-controlling interests

Due to the loss of control of Worldline, non-controlling interests are not significant for the Group anymore amounting € 3 million in continuing operations compared to € 4 million last year.

B.3.1.6 Share of net profit/(loss) of associates

Associates accounted for under equity method amounted to € 47 million in 2019 coming mainly from the contribution of Worldline since May 1, 2019.

B.3.1.7 Normalized net income

The normalized net income attributable to owners of the parent is defined as net income attributable to owners of the parent excluding unusual, abnormal, and infrequent items (attributable to owners of the parent) net of tax based on effective tax rate by country. In 2019, the normalized net income attributable to owners of the parent was € 834 million, representing 7.2% of Group revenue for the period.

(in € million)	12 months ended December 31,2019	12 months ended December 31,2018 *
Net income from continuing operations - Attributable to owners of the parent	**414**	**560**
Other operating income and expenses net of tax from continuing operations	-380	-243
Change loss on derivative instrument net of tax	-40	-
Normalized net income from continuing operations - Attributable to owners of the parent	**834**	**803**

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

B.3.1.8 Earnings per share

(In €million and shares)	12 months ended December 31, 2019	% Margin	12 months ended December 31, 2018*	% Margin
Continuing operations				
Net income from continuing operations – Attributable to owners of the parent [a]	**414**	**3.6%**	**560**	**5.3%**
Impact of dilutive instruments	-		-	
Net income from continuing operations restated of dilutive instruments - Attributable to owners of the parent [b]	**414**	**3.6%**	**560**	**5.3%**
Normalized net income from continuing operations – Attributable to owners of the parent [c]	**834**	**7.2%**	**803**	**7.5%**
Impact of dilutive instruments	-		-	
Normalized net income from continuing operations restated of dilutive instruments - Attributable to owners of the parent [d]	**834**	**7.2%**	**803**	**7.5%**
Average number of shares [e]	107,669,930		106,012,480	
Impact of dilutive instruments	4,659		15,254	
Diluted average number of shares [f]	107,674,589		106,027,734	
(In €)				
Basic EPS from continuing operations [a] / [e]	**3.84**		**5.28**	
Diluted EPS from continuing operations [b] / [f]	**3.84**		**5.28**	
Normalized basic EPS from continuing operations [c] / [e]	**7.74**		**7.57**	
Normalized diluted EPS from continuing operations [d] / [f]	**7.74**		**7.57**	
Discontinued operation				
Net income from discontinued operation – Attributable to owners of the parent [a]	**2,986**	**25.8%**	**70**	**0.7%**
Impact of dilutive instruments	-		-	
Net income from discontinued operation restated of dilutive instruments - Attributable to owners of the parent [b]	**2,986**	**25.8%**	**70**	**0.7%**
Average number of shares [e]	107,669,930		106,012,480	
Impact of dilutive instruments	4,659		15,254	
Diluted average number of shares [f]	107,674,589		106,027,734	
(In €)				
Basic EPS from discontinued operation [a] / [e]	**27.74**		**0.67**	
Diluted EPS from discontinued operation [b] / [f]	**27.73**		**0.67**	

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

Potential dilutive instruments comprised vested stock options (equivalent to 4,659 options).

B.3.2 Cash Flow

Free cash flow representing the change in net cash or net debt, excluding net acquisitions/disposals, equity changes, and dividends paid to shareholders, reached € 642 million (includes € 37 million of one-off items related to the OEB) versus € 451 million achieved in 2018.

(in €million)	**12 months ended December 31, 2019**	**12 months ended December 31, 2018***
Operating Margin before Depreciation and Amortization (OMDA)	**1,802**	**1,210**
Capital expenditures	-324	-371
Lease payments	-345	-
Change in working capital requirement	-130	-95
Cash from operation (CFO)	**1,004**	**744**
Tax paid	-99	-80
Net cost of financial debt paid	-64	-30
Reorganization in other operating income	-92	-84
Rationalization & associated costs in other operating income	-40	-22
Integration and acquisition costs	-40	-40
Other changes**	-25	-37
Free Cash Flow (FCF)	**642**	**451**
Net (acquisitions) / disposals	625	-3,138
Capital increase / (decrease)	18	13
Share buy-back	-113	-57
Dividends paid	-58	-72
Change in net cash/(debt)	**1,114**	**-2,803**
Opening net cash/(debt)	**-2,872**	**307**
Net debt from (used in) discontinued operation	35	-309
Opening net cash/(debt) restated	**-2,837**	**-2**
Change in net cash/(debt)	1,115	-2,803
Foreign exchange rate fluctuation on net cash/(debt)	-14	-32
Closing net cash/(debt)	**-1,736**	**-2,837**

** Net debt from items relating to Worldline for 2018 have been reclassified to "Net debt from (used in) discontinued operation", in accordance with IFRS 5.*
*** "Other changes" include other operating income with cash impact (excluding reorganization, rationalization and associated costs, integration and acquisition costs) and other financial items with cash impact, net long term financial investments excluding acquisitions and disposals, and profit sharing amounts payable transferred to debt.*

Cash from Operations (CFO) amounted to € 1,004 million, up significantly from the prior year. This resulted from the change of the thee following components:

- OMDA net of lease (€ +248 million);
- Capital expenditures (€ +47million);
- Change in working capital requirement (€ -35 million).

OMDA of € 1,802 million represented 15.5% of revenue, compared to 11.4% of restated revenue of last year:

(in €million)	**12 months ended December 31, 2019**	**12 months ended December 31, 2018***
Operating margin	**1,190**	**967**
+ Depreciation of fixed assets	334	336
+ Depreciation of right of use	336	-
+ Net book value of assets sold/written off	24	30
+/- Net charge/(release) of pension provisions	-60	-73
+/- Net charge/(release) of provisions	-23	-51
OMDA	**1,802**	**1,210**

** OMDA items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

Capital expenditures amounted to € 324 million or 2.8% of the revenue compared to 3.5% of the revenue 2018, reflecting the evolving business mix of the Group with a significant increase of the B&PS part as a result of Syntel integration, and the increasing of use of cloud compared to classic infrastructure.

The **change in working capital requirement** increased by € -35 million. The DSO ratio reached 47 days compared to 46 days at the end of December 2018 excluding Worldline. The level of trade receivables sold with no recourse to banks with transfer of risks as defined by IFRS 9 remain at the same level than the end of December 31, 2018.

Cash out related to **tax paid** reached € 99 million, up from the prior year, mainly due to Syntel scope.

The **cost of net debt** increased by € 34 million (reaching € 64 million compared to € 30 million in 2018) mainly explained by the financing structure due to Syntel acquisition. This impact was partially reduced thanks to the average rate of 1.58% on the average gross cash compared to 0.80% in 2018.

Reorganization, rationalization and associated costs, and integration and acquisition costs reached € 173 million compared to € 146 million in 2018. The Group objective for the full year was reached at 1% of revenue plus Syntel costs synergies implementation and German transformation plan.

Other changes amounted to € -25 million, compared to € -37 million in 2018. The 2019 figures included positive one-off items of € 37 million related to the issuance of OEB (derivative instrument net of fees). The increase without the positive on-off mainly came from pension and early retirement programs in France and in Germany, break-up fees related to supplier contract terminations as already mentioned in H1, global transformation programs and foreign exchange impacts.

As a result, the **Group Free Cash Flow (FCF)** generated during the year 2019 was € 642 million, included € 37 million of one-off items related to the issuance of OEB.

The net cash impact resulting from **net (acquisitions)/disposals** amounted to € 625 million and originated from mainly the Accelerated Bookbuilding Offering of Worldline shares on the market for € 780 million, reduced by costs of disposal and tax, as well as the costs to distribute and other costs related to the May 2019 distribution. Acquisitions are mainly related to IDnomic and X-Perion.

Capital increase totaled € 18 million in 2019 compared to € 13 million in 2018. This is mainly explained by the Group shareholding program SHARE 2018 for employees which occurred only in the first half of 2019.

Share buy-back reached € 113 million during 2019 compared to € 57 million in 2018. These share buy-back programs are related to managers performance shares delivery and aim at avoiding dilution effect for the shareholders. The increase is due to the fact that Atos had to acquire shares for two plans instead of usually one plan (Free share plan 2016 with 3-year vesting and Free share plan 2015 with 4.5-year vesting)

The Group distributed a **dividend** mostly related to dividend paid to owners of the parent which amounted to € 55 million (€ 1.70 per share) compared to € 68 million in the first half of 2018 (€ 1.70 per share).

Foreign exchange rate fluctuation determined on debt or cash exposure by country represented a decrease in net cash of €-14 million, mainly coming from the exchange rate of British Pound against Euro.

As a result, the **Group net debt position** was € 1,736 million at the end of December 2019, compared to a restated net debt position of € 2,837 million at the end of December 2018.

B.3.3 Financing policy

Atos has implemented a strict financing policy which is reviewed by the Group Audit Committee, with the objective to secure and optimize the Group's liquidity management. Each decision regarding external financing is approved by the Board of Directors. Under this policy, all Group treasury activities, including cash management, short-term investments, hedging and foreign exchange transactions, as well as financial position financing through lease contracts, are centrally managed through the Group Treasury department. Following a cautious short-term financial policy, the Group did not make any short-term cash investment in risky assets.

B.3.3.1 Financing structure

Atos' policy is to fully cover its expected liquidity requirements by long-term committed loans or other appropriate long-term financial instruments. Terms and conditions of these loans include maturity and covenants leaving sufficient flexibility for the Group to finance its operations and expected developments.

On November 14, 2019 Atos has fully repaid the term loans in USD and EUR drew on October 9, 2018 to fund the Syntel acquisition. The outstanding amounts were $ 1,045 million and € 513 million.

On October 30, 2019 Atos has announced the disposal of Worldline share capital (€ 780 million through a private placement by way of Accelerated Book building Offering (ABO)) and the issuance of € 500 million zero coupon bonds exchangeable into Worldline shares with a maturity of 5 years and an exchange premium of 35%. Total gross proceeds for Atos was € 1,280 million for the combined transactions.

On November 5, 2018, Atos announced the successful placement of its € 1.8 billion bond issue. The € 1.8 billion triple tranche bond issue consists of three tranches:

- € 700 million notes with a 3.5-year maturity and 0.75 % coupon
- € 750 million notes with a 6.5-year maturity and 1.75 % coupon
- € 350 million notes with a 10-year maturity and 2.50 % coupon

There are no financial covenants. The rating agency Standard and Poor's has assigned a rating of BBB+ to the three tranches, subsequently to the rating of Atos described here below.

On October 22, 2018, the rating agency Standard and Poor's has assigned a rating of BBB+ to Atos recognizing the strong investment grade profile of the Group.

On October 11, 2018, Atos signed with a number of major financial institutions a five-year € 2.4 billion revolving credit facility (the Facility) maturing in November 2023 with an option for Atos to request the extension until November 2025 in two times. Atos has exercised the option on 2019 to extend the maturity of the Facility until November 2024. Atos still keeps the option to extend the maturity of the Facility for another one year. The Facility is available for general corporate purposes and replaces the existing € 1.8 billion facility signed in November 2014. The Facility includes one financial covenant which is the leverage ratio (net debt divided by Operating Margin before Depreciation and Amortization) which may not be greater than 2.5 times.

On October 9, 2018, Atos drew a bridge loan of $ 1.9 billion for the acquisition of Syntel. The bridge loan was fully reimbursed on November 9, 2018.

On October 9, 2018, Atos drew a term loan of $ 1.9 billion for the acquisition of Syntel. The term loan was composed of a 3-year $ 1.1 billion loan and a 5-year $ 0.8 billion loan. The term loan issuance by currency was $ 0.6 billion equivalent euros and $ 1.3 billion in USD. On December 14, 2018, Atos reimbursed $ 200 million out of the loan drawn in USD.

The $ 1.9 billion term loan includes one financial covenant which is the leverage ratio (net debt divided by Operating Margin before Depreciation and Amortization) which may not be greater than 2.5 times.

On May 4, 2018 Atos implemented a Negotiable European Medium-Term Note program (NEU MTN) in order to optimize financial expenses and improve Group liquidity management, for an initial maximum amount of € 600 million.

On June 2, 2017, Atos implemented a Negotiable European Commercial Paper program (NEU CP) in order to optimize financial expenses and improve Group liquidity management, for an initial maximum amount of € 900 million raised to € 1.8 billion in October 2018. On December 10, 2019 the maximum amount of € 1.8 billion was increased to € 2.4 billion.

On September 29, 2016, Atos issued a Euro private placement bond of € 300 million with a seven-year maturity and with a 1.444% fixed interest rate (unrated). There are no financial covenants.

On July 2, 2015 Atos issued a bond of € 600 million with a five-year maturity. The coupon rate is 2.375% (unrated). There are no financial covenants.

Atos securitization program of trade receivables has been renewed for 5 years on May 29, 2018 with a maximum amount of receivables sold of € 500 million and a maximum amount of financing reduced from € 200 million to € 100 million. The program has been restricted to two French participant entities.

The program is still structured with two compartments, called ON and OFF:

- compartment "ON" is similar to the previous program (i.e. the receivables are maintained in the Group statement of financial position) which remains by default the compartment in which the receivables are sold. This compartment was used at its lowest level;
- compartment "OFF" is designed so the credit risk (insolvency and overdue) of the debtors eligible to this compartment of the program is fully transferred to the purchasing entity of a third-party financial institution.

As of December 31, 2019, the Group has sold:

- in the compartment "ON" € 108 million receivables for which € 10 million were received in cash. The sale is with recourse, thus re-consolidated in the statement of financial position;
- in the compartment "OFF" € 37 million receivables which qualify for de-recognition as substantially all risks and rewards associated with the receivables were transferred.

The Atos securitization program includes one financial covenant which is the leverage ratio (net debt divided by Operating Margin before Depreciation and Amortization) which may not be greater than 2.5.

B.3.3.2 Bank covenants

The Group was well within its borrowing covenant (leverage ratio) applicable to the multi-currency revolving credit facility and the securitization program, with a leverage ratio (net debt divided by OMDA) of 1.19 at the end of December 2019.

According to the credit documentation of the multi-currency revolving credit facility and the securitization program, the leverage ratio is calculated excluding IFRS 16 impacts, at the end of December 31, 2019.

The leverage ratio must not be greater than 2.5 times under the terms of the multi-currency revolving credit facility and the securitization program.

B.3.3.3 Investment policy

Atos has a policy to lease its office space and data processing centers. Some fixed assets such as IT equipment and company cars may be financed through leases. The Group Treasury department evaluates and approves the type of financing for each new investment.

B.3.3.4 Hedging policy

Atos' objective is also to protect the Group against fluctuations in interest rates by swapping to fixed rate a portion of the existing floating-rate financial debt. Authorized derivative instruments used to hedge the debt are swap contracts, entered into with leading financial institutions and centrally managed by the Group Treasury department. The Group has entered into interest rate swaps in 2018.

B.4 Consolidated financial statements

B.4.1 Consolidated income statement

(in €million)	Notes	12 months ended December 31, 2019	12 months ended December 31, 2018*
Revenue	**Note 3.1**	**11,588**	**10,648**
Personnel expenses	Note 4.1	-5,277	-4,862
Operating expenses	Note 4.2	-5,121	-4,819
Operating margin		**1,190**	**967**
% of revenue		**10.3%**	**9.1%**
Other operating income and expenses	Note 5	-530	-337
Operating income		**660**	**630**
% of revenue		**5.7%**	**5.9%**
Net cost of financial debt		-64	-30
Other financial expenses		-162	-75
Other financial income		18	38
Net financial income	Note 6.1	-208	-67
Net income before tax		**452**	**564**
Tax charge	Note 7	-82	-1
Share of net profit/(loss) of associates	Note 10	47	2
Continuing operations			
Net income from continuing operations		**417**	**564**
Of which:			
- attributable to owners of the parent		414	560
- non-controlling interests		3	4
Discontinued operation			
Net income from discontinued operation		**3,075**	**139**
Of which:			
- attributable to owners of the parent		2,986	70
- non-controlling interests		89	69
Total Group			
Net income of consolidated companies		**3,491**	**703**
Of which:			
- attributable to owners of the parent		3,399	630
- non-controlling interests		92	73

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

(In €million and shares)	Notes	12 months ended December 31, 2019	12 months ended December 31, 2018*
Net income from continuing operations - Attributable to owners of the parent	**Note 14**	**414**	**560**
Weighted average number of shares		107,669,930	106,012,480
Basic earnings per share from continuing operations		**3.84**	**5.28**
Diluted weighted average number of shares		107,674,589	106,027,734
Diluted earnings per share from continuing operations		**3.84**	**5.28**
Net income from discontinued operation - Attributable to owners of the parent	**Note 14**	**2,986**	**70**
Weighted average number of shares		107,669,930	106,012,480
Basic earnings per share from discontinued operation		**27.74**	**0.67**
Diluted weighted average number of shares		107,674,589	106,027,734
Diluted earnings per share from discontinued operation		**27.73**	**0.67**
Net income of consolidated companies - Attributable to owners of the parent	**Note 14**	**3,399**	**630**
Weighted average number of shares		107,669,930	106,012,480
Basic earnings per share of consolidated companies		**31.56**	**5.95**
Diluted weighted average number of shares		107,674,589	106,027,734
Diluted earnings per share of consolidated companies		**31.56**	**5.95**

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

B.4.2 Consolidated statement of comprehensive income

(in €million)	12 months ended December 31, 2019	12 months ended December 31, 2018
Net income of consolidated companies	**3,491**	**703**
Other comprehensive income		
- to be reclassified subsequently to profit or loss (recyclable):	**132**	**-4**
Cash flow hedging	-3	4
Exchange differences on translation of foreign operations	134	-12
Deferred tax on items recyclable recognized directly on equity	1	4
- not reclassified to profit or loss (non-recyclable):	**-98**	**-28**
Actuarial gains and losses generated in the period on defined benefit plan	-134	-39
Deferred tax on items non-recyclable recognized directly in equity	37	11
Total other comprehensive income	**34**	**-32**
Total comprehensive income for the period	**3,525**	**671**
Of which:		
- attributable to owners of the parent	3,433	609
- non-controlling interests	92	62

B.4.3 Consolidated statement of financial position

(in € million)	Notes	December 31, 2019	December 31, 2018
ASSETS			
Goodwill	Note 8.1	6,037	8,863
Intangible assets	Note 8.2	1,675	2,813
Tangible assets	Note 8.3	552	725
Right-of-use	Note 9	1,084	-
Investments in associates accounted for under the equity method	Note 10	1,727	7
Non-current financial assets	Note 6.3	351	321
Deferred tax assets	Note 7.4	325	459
Total non-current assets		**11,751**	**13,188**
Trade accounts and notes receivable	Note 3.2	2,858	2,965
Current taxes		53	74
Other current assets	Note 4.4	1,568	2,791
Current financial instruments	Note 13	7	12
Cash and cash equivalents	Note 6.2	2,413	2,546
Total current assets		**6,898**	**8,388**
TOTAL ASSETS		**18,649**	**21,576**

(in € million)	Notes	December 31, 2019	December 31, 2018
LIABILITIES AND SHAREHOLDERS' EQUITY			
Common stock		109	107
Additional paid-in capital		1,441	2,862
Consolidated retained earnings		2,278	2,760
Translation adjustments		-152	-285
Net income of consolidated companies attributable to the owners of the parent	Note 14.1	3,399	630
Equity attributable to the owners of the parent	Note 14.2	7,075	6,074
Non-controlling interests	Note 14.3	12	2,027
Total shareholders' equity		**7,087**	**8,101**
Provisions for pensions and similar benefits	Note 11	1,252	1,385
Non-current provisions	Note 12	69	101
Borrowings	Note 6.4	2,651	4,381
Derivative liabilities	Note 6.4	107	-
Deferred tax liabilities	Note 7.4	238	421
Non-current financial instruments	Note 13	2	-
Non current lease liabilities	Note 9	927	-
Other non-current liabilities		3	5
Total non-current liabilities		**5,249**	**6,295**
Trade accounts and notes payables	Note 4.3	2,278	2,462
Current taxes		182	132
Current provisions	Note 12	119	146
Current financial instruments	Note 13	1	2
Current portion of borrowings	Note 6.4	1,498	1,037
Current lease liabilities	Note 9	346	-
Other current liabilities	Note 4.5	1,888	3,400
Total current liabilities		**6,313**	**7,180**
TOTAL LIABILITIES AND SHAREHOLDER'S EQUITY		**18,649**	**21,576**

B.4.4 Consolidated cash flow statement

(in €million)	Notes	12 months ended December 31, 2019	12 months ended December 31, 2018*
Profit before tax from continuing operations		**452**	**564**
Depreciation of assets	Note 4.2	334	336
Depreciation of right-of-use	Note 4.2	336	-
Net charge / (release) to operating provisions		-82	-123
Net charge / (release) to financial provisions		31	17
Net charge / (release) to other operating provisions		19	12
Amortization of intangible assets (PPA from acquisitions)	Note 5	157	107
Losses / (gains) on disposals of fixed assets		76	-3
Net charge for equity-based compensation		67	36
Unrealized losses / (gains) on changes in fair value and other	Note 6.1	107	-3
Net cost of financial debt	Note 6.1	64	30
Interest on lease liability	Note 6.1	27	-
Cash from operating activities before change in working capital requirement, financial interest and taxes		**1,588**	**972**
Tax paid		-99	-80
Change in working capital requirement		-130	-95
Net cash from / (used in) operating activities		**1,360**	**797**
Payment for tangible and intangible assets		-324	-371
Proceeds from disposals of tangible and intangible assets		15	33
Net operating investments		**-309**	**-338**
Amounts paid for acquisitions and long-term investments		-54	-2,972
Cash and cash equivalents of companies purchased during the period		5	-179
Proceeds from disposals of financial investments		670	11
Cash and cash equivalents of companies sold during the period		-1	-
Dividend received from entities consolidated by equity method		-	1
Net long-term investments		**619**	**-3,139**
Net cash from / (used in) investing activities		**310**	**-3,477**
Capital Increase		14	-
Common stock issues on the exercise of equity-based compensation		4	13
Purchase and sale of treasury stock		-113	-57
Dividends paid		-55	-68
Dividends paid to non-controlling interests		-3	-4
Lease payments		-345	-
New borrowings	Note 6.5	591	3,555
Finance lease		-	1
Repayment of current and non-current borrowings	Note 6.5	-1,657	-271
Net cost of financial debt paid		-64	-30
Other flows related to financing activities		4	-
Net cash from / (used in) financing activities		**-1,624**	**3,138**
Increase / (decrease) in net cash and cash equivalents		**46**	**458**
Opening net cash and cash equivalents		**2,378**	**2,182**
Net cash from (used in) discontinued operation		-95	-334
Increase / (decrease) in net cash and cash equivalents	Note 6.5	46	458
Impact of exchange rate fluctuations on cash and cash equivalents		5	-24
Closing net cash and cash equivalents	Note 6.5	**2,334**	**2,282**

** Net cash and cash equivalent flows relating to Worldline for 2018 have been reclassified to "Net cash from (used in) discontinued operation", in accordance with IFRS 5.*

B.4.5 Consolidated statement of changes in shareholders' equity

(in € million)	**Number of shares at period-end** *(thousands)*	**Common Stock**	**Additional paid-in capital**	**Consolidated retained earnings**	**Translation adjustments**	**Items recognized directly in equity**	**Net income**	**Total**	**Non controlling interests**	**Total shareholders' equity**
At December 31, 2017 restated	**105,444**	**105**	**2,740**	**1,490**	**-282**	**8**	**601**	**4,662**	**564**	**5,226**
▪ Common stock issued	1,442	2	122					123	5	128
▪ Appropriation of prior period net income	-	-	-	601	-	-	-601	-	-	-
▪ Dividends paid				-179				-179	-11	-190
▪ Equity-based compensation				53				53	4	57
▪ Changes in treasury stock				-84				-84	-13	-97
▪ Dilution impact				891				891	1,417	2,308
▪ Acquisition of Non controlling interest without a change in control				1				1	-1	-
▪ Other				-2			-	2	0	-2
Transactions with owners	**1,442**	**2**	**122**	**1,281**	**-**	**-**	**-601**	**803**	**1,400**	**2,204**
▪ Net income							630	630	73	703
▪ Other comprehensive income				-22	-3	3		-22	-11	-32
Total comprehensive income for the period				**-22**	**-3**	**3**	**630**	**609**	**62**	**671**
At December 31, 2018	**106,886**	**107**	**2,862**	**2,748**	**-285**	**11**	**630**	**6,074**	**2,027**	**8,101**
▪ Adjustment on initial application of IFRS 16, net of tax	-	-	-	-	-	-	-	-	-	-
At December 31, 2018, adjusted	**106,886**	**107**	**2,862**	**2,748**	**-285**	**11**	**630**	**6,074**	**2,027**	**8,101**
▪ Common stock issued	2,329	2	140					142		142
▪ Appropriation of prior period net income				630			-630	-0		-0
▪ Dividends paid				-182				-182	-3	-185
▪ Distribution in kind of Worldline shares			-1,561	-783				-2,344		-2,344
▪ Equity-based compensation				67				67		67
▪ Changes in treasury stock				-113				-113		-113
▪ Non controlling interests Worldline								-	-2,107	-2,107
▪ Other					-1			-1	3	2
Transactions with owners	**2,329**	**2**	**-1,421**	**-381**	**-1**	**-**	**-630**	**-2,431**	**-2,107**	**-4,538**
▪ Net income of consolidated companies							3,399	3,399	92	3,491
▪ Other comprehensive income				-98	134	-2		34		34
Total comprehensive income for the period				**-98**	**134**	**-2**	**3,399**	**3,433**	**92**	**3,525**
At December 31, 2019	**109,215**	**109**	**1,441**	**2,269**	**-152**	**9**	**3,399**	**7,075**	**12**	**7,087**

B.4.6 Notes to the consolidated financial statements

B.4.6.1 General information

Atos SE, the Group's parent company, is a société européenne (public limited company) incorporated under French law, whose registered office is located at 80, Quai Voltaire, 95870 Bezons, France. It is registered with the Registry of Commerce and Companies of Pontoise under the reference 323623603. Atos SE shares are traded on the NYSE Euronext Paris market under ISIN code FR0000051732. The shares are not listed on any other stock exchange. The Company is administrated by a Board of Directors.

The consolidated financial statements of the Group for the twelve months ended December 31, 2019 comprise the Group and its subsidiaries (together referred to as the "Group") and the Group's interests in associates and jointly controlled entities.

These consolidated financial statements were approved by the Board of Directors on February 18, 2020. The consolidated financial statements will be submitted to the approval of the General Meeting of Shareholders scheduled to take place on May 14, 2020.

B.4.6.2 Basis of preparation and significant accounting policies

Basis of preparation

Pursuant to European Regulation No. 1606/2002 of July 19, 2002, the consolidated financial statements for the twelve months ended December 31, 2019 have been prepared in accordance with the applicable international accounting standards, as endorsed by the European Union as at December 31, 2019. The international standards comprise the International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB), the International Accounting Standards (IAS), the interpretations of the Standing Interpretations Committee (SIC) and the International Financial Reporting Interpretations Committee (IFRIC). Accounting policies applied by the Group comply with those standards and interpretations.

As of December 31, 2019, the accounting standards and interpretations endorsed by the European Union are similar to the compulsory standards and interpretations published by the International Accounting Standards Board (IASB). Consequently, the Group's consolidated financial statements are prepared in accordance with the IFRS standards and interpretations, as published by the IASB.

Except for the impacts of IFRS 16 first time application separately disclosed, the other new standards, interpretations or amendments whose application was mandatory for the Group effective for the fiscal year beginning January 1, 2019 had no material impact on the consolidated financial statements:

- IFRIC 23 – Uncertainty over Income Tax Treatments.
- Amendments to IFRS 9 - Prepayment Features with Negative Compensation.
- Amendments to IAS 28 – Long Term Interests in Associates and Joint Ventures.
- Amendments to IAS 19 – Plan Amendment – Curtailment and Settlement.
- Annual Improvements to IFRS Standards 2015–2017 Cycle – various standards.

Other standards

The Group does not apply IFRS standards and interpretations that have not been yet approved by the European Union at the closing date. New standards are effective for annual periods beginning after January 1, 2020 and an earlier application is permitted. The Group has not early applied those amended standards in preparing these consolidated statements. The Group does not anticipate any significant impact from the implementation of those new standards:

- Amendments to IFRS 3 – Definition of a business.
- Amendments to IAS 1 and IAS 8 - Definition of Material.
- Amendments to References to Conceptual Framework in IFRS Standards.
- IFRS 17 - Insurance Contracts.

The Group will continue to apply the amendments to IFRS 9/IAS 39, both in terms of timing and the amounts of the underlying cash flows to which it is exposed, until there is more clarity relating to the reform to benchmark interest rates ("IBOR reform"). The Group believes that the situation will be unclear for as long as (i) the existing contracts that refer to these rates are not amended to specify the date on which the benchmark rate will be replaced, and (ii) the impacts related to the use of the new benchmark interest rate and ensuing adjustments to lending margins have not been determined. How the situation evolves will partly depend on the replacement clauses that will need to be added to the contracts concerned and negotiations with lenders and bondholders.

Changes in accounting policies – IFRS 16, *Leases*, first application

IFRS 16, *Leases*, introduces a single on-balance sheet lease accounting model for lessees requiring them to recognize a right-of-use asset representing its right to use the underlying asset and a lease liability representing its obligation to make future lease payments.

IFRS 16, *Leases*, replaces existing IAS 17, Leases, IFRIC 4, *Determining whether an Arrangement contains a Lease*, SIC 15, *Operating Leases-Incentives* and SIC-27, *Evaluating the Substance of Transactions Involving the Legal Form of a Lease*.

The Group applied IFRS 16 as of January 1, 2019 using the modified retrospective approach under which the comparative period is not restated. Instead, the cumulative impact of the application of the new standard is recognized in retained earnings at the transition date. Impact on equity is nil as of January 1, 2019.

Atos as a lessee

At transition date, the Group applied the practical expedient to grandfather the definition of a lease. This means that as at January 1, 2019, the Group applied IFRS 16 to all alive contracts entered before this date and identified as leases in accordance with IAS 17 and IFRIC 4. For contracts entered into after January 1, 2019, the Group assesses whether a contract is or contains a lease based on the new definition of a lease. Under IFRS 16, a contract is, or contains, a lease if the contract conveys a right to control the use of an identified asset for a period in exchange for consideration.

The Group also applies exemptions allowed by IFRS 16.5 to not recognize short term leases (less than 12 months) and leases for which the underlying asset is of a low value. Payments under such contracts are registered in the income statement, on a straight-line basis, over the term of the contract. Future commitments to pay rents are presented as off-balance-sheet commitments.

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using a Group's incremental borrowing rate. Those rates have been determined for all currencies of the Group by geographies and by maturity. The incremental borrowing rates are calculated by taking for each currency a reference market index quotation and adding up a spread corresponding to the cost of financing that would be applied by a lender to any subsidiary of Atos Group.

The lease liability is subsequently increased by the interest cost on the lease liability and decreased by lease payments made. It is remeasured when there is a change in the future lease payments arising from a change in an index or rate, a change in estimate of the amount expected to be payable under a residual value guarantee, or changes in the assessment of whether an extension option is reasonably certain to be exercised or a termination option is reasonably certain to be exercised resulting from a decision of the Group.

The Group has applied judgment to determine the lease term for some Real Estate lease contracts in which it is a lessee and that include renewal or early termination options analyzing whether those sites, mainly offices and data centers, were strategic or not. In most cases, the Group retained the earliest date when the Group can go out from its lease commitment without paying or supporting any significant penalty except for French 3/6/9 specific leases where the 9^{th} year has systematically been defined as lease term.

The Group is currently studying latest decisions issued by IFRIC around the definition of the enforceable contractual period of a lease and does not anticipate any major impact of those decisions.

Atos as a lessor

For leases in which Atos is acting as a lessor, IFRS 16 does not trigger any change on the existing accounting treatment under previous standards and interpretations. As part of Infrastructure & Data Management and Big Data & Cybersecurity businesses, the Group may, in some circumstances, provide IT equipments to its customers through a manufacturer or dealer-lessor model. When those leases qualify as finance leases, the revenue corresponding to the sale of the asset is recognized and the corresponding asset is presented as a contract asset. The same accouting treatment used to be applied under IFRIC 4.

Impacts on financial statements

The Group elected to present the lease liability and the right-of-use the assets on dedicated lines of the Statement of financial position. Amortization of the right-of-use is part of the operating margin, interest costs are part of the financial result of the Group. The impact of IFRS 16 implementation on Operating Margin and Group net result is not material as of December 31, 2019. The Group elected to exclude the lease liabilities from the Group net debt definition. Therefore, Free Cash Flow as per Group definition remains comparable with prior years.

The Group elected to account the net deferred taxes resulting from IFRS 16 standard application. At transition date assets and liabilities resulting from IFRS 16 have the same value, therefore no temporary differences are recognized.

Excluding Worldline which is presented as held for distribution as of January 1, 2019, IFRS 16 led to the recognition of an opening lease liability for € 1,202 million. This liability relates mainly to Real Estate, IT equipment's and company cars. Reconciliation of operating lease commitments as of December 31, 2018 and opening lease liability as of January 1, 2019 is as follows:

(In € million)

Operating lease commitment at December 31, 2018 as disclosed in the Group's consolidated financial statements	**1,559**
Worldline held for distribution	-210
Short-term and low value assets leases (IFRS 16 exceptions)	-10
Discounting effect	-144
Finance lease liabilities recognised as at December 31, 2018	12
Other impacts	-5
Lease liabilities recognised at January 1, 2019	**1,202**

The impacts of the first application of IFRS 16 on the opening statement of financial position are the following, excluding Worldline which is presented as held for distribution as of January 1, 2019:

- the accounting of the right-of-use assets for an amount of € 1,206 million, non-current lease liabilities for € 877 million and current lease liabilities for € 325 million (those amounts are considered as net of prepaid leases); the previous amounts include the reclassification of recognized tangible assets and financial debt related to existing finance leases as of December 31, 2018 for an amount of € 12 million to right-of-use and lease liability;
- the reclassification of lease incentive benefits from current and non-current liabilities to reduction of the right-of-use assets for € 23 million; this amount reduces the amount of right-of-use assets indicated hereabove;
- the reclassification of onerous lease provision from non-current liabilities to reduction of the right-of-use assets for an amount of € 7 million; this amount reduces the amount of right-of-use assets indicated hereabove.

Accounting estimates and judgments

The preparation of consolidated financial statements requires management to make judgments, estimates and assumptions that affect the reported amounts of assets and liabilities, income and expense in the financial statements and disclosures of contingent assets and liabilities at the closing date. The estimates, assumptions and judgments that may result in a significant adjustment to the carrying amounts of assets and liabilities are essentially related to:

- Revenue recognition: Estimates of percentage of completion, potential loss to go (Note 3 – Revenue, trade receivables, contract assets and contract costs);
- Acquisition of subsidiaries: Fair value of the consideration transferred (including contingent consideration) and fair value of the assets acquired, and liabilities assumed (Note 1 – Changes in the scope of consolidation)
- Impairment test of intangible assets and Goodwill: key assumptions underlying recoverable amounts (Note 8 – Goodwill & fixed assets);
- Recognition and measurement of deferred tax assets: availability of future taxable profits against which deductible temporary differences and tax losses carried forward can be utilized (Note 7 – Income tax)
- Recognition and measurement of provisions and contingencies: key assumptions about the likelihood and magnitude of outflow of ressources with no counterparty (Note 12 – Provisions)

- Measurement of Defined Benefit Obligations: Key actuarial assumptions (Note 11 - Pensions plans and other long-term benefits).
- Lease liabilities and right-of-use: estimates of the enforceable contractual period of a lease and incremental borrowing rate used (Note 9 – Leases).

Consolidation methods

Subsidiaries are entities controlled directly or indirectly by the Group. Control is defined by the ability to govern the financial and operating policies generally, but not systematically, combined with a shareholding of more than 50 percent of the voting rights. The existence and effect of potential voting rights that are currently exercisable or convertible, the power to appoint the majority of the members of the governing bodies and the existence of veto rights are considered when assessing whether the Group controls another entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group. They are de-consolidated from the date on which control ceases.

Jointly controlled companies are accounted for under the equity method when they are classified as joint ventures and consolidated based on the percentage share specific to each statement of financial position and income statement item when they are classified as joint operations. Associates over which the Group has significant influence are accounted under equity method.

Financial assets classification and business model

IFRS 9 defines three approaches to classify and measure financial assets based on their initial recognition.

- Amortized cost;
- Fair value though other components of comprehensive income;
- Fair value through income statement.

Financial assets are classified according to these three categories by reference to the business model the Group uses to manage them, and the contractual cash flows they generate.

Loans, receivables and other debt instruments considered “basic lending arrangements” as defined by IFRS 9 (contractual cash flows that are solely payments of principal and interest) are carried at amortized cost when they are managed with the purpose of collecting contractual cash flows, or at fair value through other components of comprehensive income when they are managed with the purpose of collecting contractual cash flows and selling the asset, while debt instruments that are not “basic lending arrangements” or do not correspond to these business models are carried at fair value through income statement. Equity instruments are carried at fair value through income statement or, under an irrevocable option, at fair value through Other components of comprehensive income.

The business model of the Group is to collect its contractual cash flows for its trade receivables.

Trade receivables can be transferred to third parties (banks) with conditions of the transfers meeting IFRS 9 requirements, meaning transfer of contractual cash flows and transfer of substantially all risks and rewards are achieved. Those trade receivables are in that case derecognized, further to the analysis of the actual transfer of risks, the non-materiality of any dilution risk based on experience, and the absence of continuing involvement.

Presentation rules

Current and non-current assets and liabilities

Assets and liabilities classified as current are expected to be realized, used or settled during the normal cycle of operations. All other assets and liabilities are classified as non-current. Current assets and liabilities, excluding the current portion of borrowings, financial receivables and provisions represent the Group’s working capital requirement.

Assets and liabilities held for sale/distribution and discontinued operations

Assets and liabilities held for sale/distribution or part of discontinued operations are presented on separate lines in the Group’s consolidated statement of financial position, without restatements for previous periods. They are measured at the lower of their carrying amount and fair value less costs to sell/distribute. Non-current assets and liabilities are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. This condition is regarded as met only when the sale is highly probable, and the assets and liabilities are available for immediate sale in their present condition at the reporting date.

When these assets and liabilities represent either a complete business line or a business unit, the profit or loss from these activities are presented on a separate line of the income statement and is restated in the cash flow statement and the income statement.

Translation of financial statements denominated in foreign currencies

Statements of Financial Positions of companies based outside the euro zone are translated at closing exchange rates. Income statement items are translated based on average exchange rates for the period. Statement of Financial Position and income statement translation adjustments arising from a change in exchange rates are recognized as a separate component of equity under "Translation adjustments".

Goodwill and fair value adjustments arising on the acquisition of a foreign entity have been treated as assets and liabilities of that foreign entity and translated into euro at the closing date.

The Group does not consolidate any entity operating in a hyperinflationary economy except Argentina. Argentina is a hyperinflationary economy since July 1, 2018. As such, all Profit & Loss items from Argentinian entities have been restated from inflation in accordance with IAS 29.

Translation of transactions denominated in foreign currencies

Foreign currency transactions are translated into the functional currency using the exchange rate prevailing at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of such transactions and from the translation at year-end exchange rates of monetary assets and liabilities denominated in foreign currencies are recognized in the income statement under the heading "Other financial income and expenses", except where hedging accounting is applied as explained in the paragraph "Financial assets – Derivative financial instruments".

B.4.6.3 Alternative Performance Measures

Operating margin

Operating margin equals to External Revenues less personnel and operating expenses. It is calculated before Other Operating Income and Expenses as defined below.

Other Operating Income and Expenses

Other operating income and expenses include:

- The amortization and impairment of intangible assets recognized as part of business combinations such as customer relationships, technologies and Goodwill;
- When accounting for business combinations, the Group may record provisions in the opening statement of financial position for a period of 12 months beyond the business combination date. After the 12-month period, unused provisions arising from changes in circumstances are released through the income statement under "Other operating income and expenses";
- The cost of acquiring and integrating newly controlled and consolidated entities, including earn out expenses;
- The net gain or losses on disposals of consolidated companies or businesses;
- The fair value of shares granted to employees including social contributions;
- The restructuring and rationalization expenses relating to business combinations or qualified as unusual, infrequent and abnormal. When a restructuring plan qualifies for Other Operating Income and Expenses, the related real estate rationalization & associated costs regarding premises are presented on the same line;
- The curtailment effects on restructuring costs and the effects of plan amendments on Defined Benefit Obligation resulting from triggering events that are not under control of Atos management;
- The net gain or loss on tangible and intangible assets that are not part of Atos core-business such as Real Estate;
- Other unusual, abnormal and infrequent income or expenses such as major disputes or litigation.

Normalized net income

The normalized net income is the net income (Group Share – excluding net result attributable to Non-Controlling Interests) before Other Operating Income and Expenses and changes in derivative liabilities, net of taxes.

Normalized earnings per share

Normalized earnings per share are calculated by dividing the normalized net income (Group share) by the weighted-average number of common shares outstanding during the period, excluding treasury shares.

Net debt

The net debt comprises total borrowings (bonds, short term and long-term loans, securitization and other borrowings), short-term financial assets and liabilities bearing interest with maturity of less than 12 months, less net cash and cash equivalents. Lease liabilities and derivative liabilities are excluded from the net debt.

Free Cash Flow

The Free Cash Flow represents the change in net cash or net debt, excluding equity changes, share buyback, dividends paid to shareholders and non-controlling interests, net acquisition or disposal of companies or businesses.

B.4.6.4 Financial risk management

The Group’s activities expose it to a variety of financial risks including liquidity risk, interest rate risk, credit risk and currency risk. Financial risk management is carried out by the Group Treasury department and involves minimizing potential adverse effects on the Group’s financial performance.

Liquidity risk

Liquidity risk management involves maintaining sufficient cash and marketable securities and the availability of funding through an adequate amount of committed credit facilities.

Atos’ policy is to cover in full its expected liquidity requirements by long-term committed loans or other appropriate long-term financial instruments. Terms and conditions of these loans include maturity and covenants leaving sufficient flexibility for the Group to finance its operations and expected developments.

Credit facilities are subject to financial covenants that are carefully followed by the Group Treasury department.

An analysis of the maturity of financial liabilities is disclosed in Note 6.4.

Interest rate risk

Interest rate risk arises mainly on borrowings. The management of exposure to interest rate risk encompasses two types:

- a price risk on fixed-rate financial assets and liabilities. For example, by contracting a fixed-rate liability, the Group is exposed to potential opportunity losses should interest rates fall. A change in interest rates would impact the market value of fixed-rate financial assets and liabilities. However, this loss of opportunity would not impact financial income and expenses as reported in the consolidated income statement and, as such, future net income of the Group up to maturity of these assets;
- a risk on floating-rate financial assets and liabilities should interest rates increase.

The main objective of managing overall interest rate risk on the Group’s debt is to minimize the cost of debt and to protect the Group against fluctuations in interest rates by swapping to fixed rate a portion of the floating-rate financial debt. Authorized derivative instruments used to hedge the debt are swap contracts entered with leading financial institutions.

Credit risk

The Group has no significant concentrations of credit risk. The client selection process and related credit risk analysis is fully integrated within the global risk assessment project conducted throughout the life cycle of a project. Derivative counterparties and cash transactions are limited to high-credit quality financial institutions.

Currency risk

Atos Group policy promotes natural hedge positions in which costs and revenues are denominated in the same currency.

Nevertheless, the Group's financial performance can be influenced by fluctuations in exchange rate considering a growing portion of the external business involving offshore costs centers based mostly in India and Central Europe.

The Group has established a policy for managing foreign exchange positions resulting from commercial and financial transactions denominated in currencies different from the local currency of the relevant entity. According to this policy, any material exposure must be hedged as soon as it occurs. In order to hedge its foreign exchange rate exposure, the Group uses a variety of financial instruments, mainly forward contracts and foreign currency swaps.

Price risk

The Group has no material exposure to the price of equity securities, nor is it exposed to commodity price risks.

B.4.6.5 Notes to the consolidated financial statements

Note 1 Changes in the scope of consolidation

Business combination and goodwill

A business combination may involve the purchase of another entity, the purchase of all the net assets of another entity or the purchase of some of the net assets of another entity that together form one or more businesses.

Major services contracts involving staff and asset transfers that enable the Group to develop or significantly improve its competitive position within a business or a geographical sector are accounted for as business combinations when fulfilling the definition of a business under IFRS 3.

Valuation of assets acquired, and liabilities assumed of newly acquired subsidiaries

Business combinations are accounted for according to the acquisition method. The consideration transferred in exchange for control of the acquired entity is measured at fair value. It is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquire and the equity interests issued by the Group in exchange for control of the acquiree.

Direct transaction costs related to a business combination are charged to the income statement when incurred and presented as part of the Other Operating Income and Expenses.

Non-controlling interests may, on the acquisition date, be measured either at fair value or based on their stake in the fair value of the identifiable assets and liabilities of the acquired entity. The choice of measurement methodology is made on a transaction-by-transaction basis.

All the assets, liabilities and contingent liabilities of the acquired subsidiary are measured at their fair value in the opening statement of financial position at acquisition date. The opening statement of financial position is adjusted, when necessary, during the 12 months following the acquisition date.

In step acquisitions, any equity interest held previously by the Group is remeasured at fair value at the acquisition date (i.e. the date when the Group obtains control) and the resulting gain or loss is recognized in Other Operating Income and Expenses.

Purchase of non-controlling interests and sale of interests in a controlled subsidiary

Purchase of non-controlling interests and sale transactions of interests in a controlled subsidiary that do not change the status of control are recorded through shareholders' equity (including direct acquisition costs).

If control in a subsidiary is lost, any gain or loss is recognized in Other Operating Income and Expenses. Furthermore, if an investment in the entity is retained by the Group, it is re-measured to its fair value and any gain or loss is also recognized in Other Operating Income and Expenses.

1.1 Acquisition of Syntel in 2018

Atos acquired 100% of Syntel Inc. which is fully consolidated since November 1, 2018. The purchase price allocation has been revised in the 12 months following the acquisition. Fair value of assets and liabilities acquired have been reviewed based on circumstances existing at acquisition date leading to the recognition of a final Goodwill of € 2,464 million:

Consideration transferred and goodwill

(in € million)	Goodwill
Total consideration paid [A]	2,966
USD versus EUR Hedging of the consideration paid [B]	-39
Tax effect on USD versus EUR Hedging of the consideration paid [C]	13
Fair value of identifiable net assets [D]	476
Goodwill [A] + [B] + [C] - [D]	**2,464**

The residual goodwill is attributable to Syntel' highly skilled workforce and some know-how. It also reflects the synergies expected to be achieved from integrating Syntel operations into the Group. The goodwill arising from the acquisition is not tax deductible.

1.2 Acquisitions in 2019

IDnomic

The Group acquired IDnomic, European leader in digital identity management infrastructure to reinforce its global leadership in cybersecurity and expands its offering in the field of digital identity management and PKI (Public Key Infrastructure) solutions. The consideration transferred was € 38 million leading to the recognition of a preliminary goodwill of € 18 million.

1.3 Distribution in kind of Worldline shares

Discontinued operations up to April 30, 2019

Following the decision made on January 29, 2019 by Atos Board of Directors to submit to Annual General Meeting the project to distribute 23.5% of Worldline total shares to Atos shareholders and the approval of the transaction by Atos shareholders at the Annual General Meeting on April 30, 2019, this distribution took effect on May 7, 2019, the payment date for the stock dividend. Thus, in accordance with IFRS 5, Worldline's results up to April 30, 2019 (instead of May 7, 2019 for practical reasons) have been reclassified to "Net income from discontinued operation".

The distribution to Atos shareholders was made based on a ratio of 2 Worldline shares for 5 Atos shares held, in accordance with the terms of the transaction announced by Atos on March 22, 2019 and valued at the opening price on May 7, 2019 of the Worldline share (€ 54.70).

Under IFRS, the distribution in kind of Worldline shares took place in two steps: (i) the first step is the sale of the 50.8% of Worldline shares held by Atos, and (ii) the second step is the acquisition of the 27.3% of Worldline shares retained by Atos.

The net gain resulting from the loss of control of all Worldline shares held by the Group following the distribution was recognized in the consolidated income statement in "Net income from discontinued operation". This gain was presented net of current and deferred taxes and costs to distribute the Worldline shares (after tax). Cash flows relating to Worldline operations up to April 30, 2019 have been reclassified in the consolidated statement of cash flows to "Net cash from (used in) discontinued operation".

Impact on the consolidated income statement

Worldline was not previously classified as held-for-distribution or as a discontinued operation. The comparative condensed consolidated income statement has been restated to show the discontinued operation separately from continuing operations.

The flows relating to the services rendered by the continuing operations to Worldline have been eliminated at the Worldline level. As a result, the external revenue of the Group includes revenues related to such flows.

Detailed income statement of the discontinued operation

(in € million)	**From January 1, 2019 to April 30, 2019***	**From January 1, 2018 to December 31, 2018**
Revenue	**705**	**1,610**
Personnel expenses	-289	-692
Operating expenses	-263	-625
Operating margin	**153**	**293**
% of revenue	**21.7%**	**18.2%**
Other operating income and expenses	-22	-87
Operating income	**131**	**206**
% of revenue	**18.6%**	**12.8%**
Net financial income	71	-20
Net income before tax	**201**	**-186**
Tax charge	-48	-45
Net gain (loss) on disposal of discontinued operation	2,931	-
Other costs related to the distribution of Worldline shares	-8	-
Net income	**3,075**	**139**
Of which:		
- attributable to owners of the parent	**2,986**	**70**
- non-controlling interests	89	69

** Income and expense items relating to Worldline for 2019 have been reclassified until April 30, 2019 to "Net income from discontinued operation", in accordance with IFRS 5. See note 1.*

The deconsolidation of Worldline following the distribution in kind generated a net gain of € 2,931 million in 2019. This amount is net of € 29 million of cost to distribute (after tax).

Investment in Associates from May 1, 2019

Following the distribution, Atos held 27.3% of Worldline's share capital and 35% of voting rights, subject to a six-month lock-up period. Starting May 1, 2019, the Group has no more control on Worldline, but a significant influence on Worldline. As such, the Group investment in Worldline was from that date presented as part of "Investments in associates accounted for under the equity method" in the 2019 consolidated financial statements. A purchase price allocation has been performed for the part of the business which is still held by the Group.

The Group share of Worldline net contributive result since May 1, 2019 is presented in the Group 2019 consolidated income statement in "Share of net profit/(loss) of associates". The new intangible assets generated by the purchase price allocation exercise are amortized on the same line.

1.4 Disposal of part of Worldline shares in November 2019

After having distributed 23.5% of Worldline shares to its Shareholders on May 7, 2019, Atos has completed in November 2019:

- the sale of 14.7 million of Worldline shares through an Accelerated Bookbuilding Offering (ABO);
- the issuance of € 500 million bond which will be exchangeable into Worldline shares;
- the transfer of £ 198 million (€ 230 million) of Worldline shares to Atos UK Pension Scheme in exchange of no additional funding in cash of the scheme for the next 15 years.

After completion of November transactions, Atos voting rights over Worldline amounted to 25.6%. The review of the governance led to the conclusion that Atos still has significant influence over Worldline. As such, the Group continued to consolidate Worldline under Equity method.

Note 2 Segment information

According to IFRS 8, reported operating segments profits are based on internal management reporting information that is regularly reviewed by the chief operating decision maker, and is reconciled to Group profit or loss. The chief operating decision maker assesses segments profit or loss using a measure of operating profit. The chief operating decision maker, who is responsible for allocating resources and assessing performance of the operating segments, has been identified as the company CEOs who makes strategic decisions.

The internal management reporting is built on two axes: Global Business Units and Divisions (Infrastructure & Data Management (IDM), Business & Platform Solutions (B&PS), Big Data & Cybersecurity (BDS). Global Business Units have been determined by the Group as key indicators by the chief operating decision maker. As a result, and for IFRS 8 requirements, the Group discloses Global Business Units as operating segments.

A Business Unit is defined as a geographical area or the aggregation of several geographical areas which contain one or several countries, without taking into consideration the activities exercised within each country. Each Business Unit is managed by a dedicated member of the Executive Committee.

The measurement policies that the Group uses for segmental reporting under IFRS 8 are the same as those used in its financial statements. Corporate entities are not presented as an operating segment. Therefore, their financial statements are used as a reconciling item. Corporate assets which are not directly attributable to the business activities of any operating segments are not allocated to a segment, which primarily applies to the Group's headquarters. Shared assets such as the European mainframe are allocated to the Business Unit where they are physically located even though they are used by several Business Units.

Operating segments	Activities
United Kingdom & Ireland	Business & Platform Solutions, Infrastructure & Data Management and Big Data and Cybersecurity in Ireland and the United Kingdom.
France	Business & Platform Solutions, Infrastructure & Data Management and Big Data and Security in France and Morocco offshore delivery Center.
Germany	Business & Platform Solutions, Infrastructure & Data Management and Big Data and Security in Germany.
North America	Business & Platform Solutions, Infrastructure & Data Management and Big Data and Cybersecurity in Canada, Guatemala, Mexico and the United States of America
Benelux & The Nordics	Business & Platform Solutions, Infrastructure & Data Management and Big Data and Cybersecurity in Belarus, Belgium, Denmark, Estonia, Finland, Lithuania, Luxembourg, Poland, Russia, Sweden and The Netherlands.
Other Business Units	Business & Platform Solutions, Infrastructure & Data Management and Big Data and Cybersecurity in Algeria, Andorra, Argentina, Australia, Austria, Bosnia and Herzegovina, Brazil, Bulgaria, Chile, China, Colombia, Croatia, Czech Republic, Egypt, Gabon, Greece, Hungary, Hong-Kong, India, Israel, Italy, Ivory Coast, Japan, Lebanon, Malaysia, Madagascar, Mauritius, Morocco, Namibia, New-Zealand, Philippines, Portugal, Qatar, Romania, Saudi-Arabia, Senegal, Singapore, Serbia, Slovakia, Slovenia, South-Africa, South Korea, Spain, Switzerland, Taiwan, Thailand, Tunisia, Turkey, UAE, Uruguay and also Major Events activities, Global Delivery Centers

Inter-segment transfers or transactions are entered into under the normal commercial terms and conditions that would also be available to unrelated third parties. The revenues from each external contract amounted to less than 10% of the Group's revenue.

The operating segment information for the periods was the following:

(in € million)	United Kingdom and Ireland	France	Germany	North America	Benelux & The Nordics	Other Business Units	Total Operating segments	Global Structures	Elimination	Total Group
12 months ended December 31, 2019										
External revenue by segment	**1,669**	**1,788**	**2,167**	**2,725**	**1,047**	**2,192**	**11,588**			**11,588**
% of Group revenue	14.4%	15.4%	18.7%	23.5%	9.0%	18.9%	100.0%			100.0%
Inter-segment revenue	72	304	193	780	160	970	2,478	326	-2,804	-
Total revenue	1,740	2,091	2,360	3,506	1,206	3,162	14,066	326	-2,804	11,588
Segment operating margin	**165**	**164**	**152**	**343**	**88**	**319**	**1,232**	-42	-	**1,190**
% of margin	9.9%	9.2%	7.0%	12.6%	8.4%	14.6%	10.6%			10.3%
Total segment assets	**1,459**	**2,077**	**1,845**	**4,817**	**932**	**2,380**	**13,510**	**2,348**		**15,858**
Other information on income statement										
Depreciation of assets	-40	-38	-71	-67	-29	-69	-312	-22		-334
Depreciation of right of use	-24	-30	-59	-76	-45	-87	-322	-14		-336
Other informations										
Capital expenditure	26	53	85	49	17	58	289	35		324
Net (debt) / cash	-753	-36	511	1,370	368	1,110	2,571	-4,307		-1,736
Year end headcount	9,538	11,196	9,331	10,698	5,398	60,795	106,955	1,362		108,317
12 months ended December 31, 2018 *										
External revenue by segment	**1,620**	**1,723**	**2,168**	**2,022**	**1,027**	**2,088**	**10,648**			**10,648**
% of Group revenue	15.2%	16.2%	20.4%	19.0%	9.6%	19.6%	100.0%			100%
Inter-segment revenue	225	381	431	264	281	1,753	3,335	301	-3,635	-
Total revenue	1,845	2,104	2,598	2,287	1,308	3,841	13,983	301	-3,635	10,648
Segment operating margin	**193**	**150**	**137**	**202**	**76**	**275**	**1,033**	-66		**967**
% of margin	11.9%	8.7%	6.3%	10.0%	7.4%	13.2%	9.7%			9.1%
Total segment assets	**1,094**	**1,684**	**1,782**	**4,447**	**810**	**2,073**	**11,889**	**475**		**12,364**
Other information on income statement										
Depreciation of assets	-34	-32	-77	-78	-32	-58	-311	-25		-336
Depreciation of right of use	-	-	-	-	-	-	-	-		-
Other informations										
Capital expenditure	33	56	102	54	27	76	348	23		371
Net (debt) /cash	-630	148	471	151	244	930	1,314	-4,151		-2,837
Year end headcount	9,111	11,296	9,526	11,876	5,746	61,704	109,259	1,377		110,636

** Figures presented are restated from Worldline activities, in accordance with IFRS 5.*

The assets detailed above by segment are reconciled to total assets as follows:

(in € million)	December 31, 2019	December 31, 2018
Total segment assets	**15,858**	**12,364**
Total segment assets from Worldline*	-	6,133
Tax Assets	378	533
Cash & Cash Equivalents	2,413	2,546
Total Assets	**18,649**	**21,576**

** Worldline is no more considered as segment.*

The Group revenues from external customers are split into the following divisions:

(in €million)	Infrastructure and data management	Business & Platform solutions	Big Data & cybersecurity	Total Group
12 months ended 31 December, 2019				
External revenue by segment	**6,321**	**4,216**	**1,050**	**11,588**
% of Group revenue	54.6%	36.4%	9.1%	100.0%
12 months ended December 31, 2018*				
External revenue by segment	**6,360**	**3,392**	**896**	**10,648**
% of Group revenue	59.7%	31.9%	8.4%	100.0%

** Figures presented are restated from Worldline activities, in accordance with IFRS 5.*

Note 3 Revenue, trade receivables, contract assets and contract costs

Revenue is recognized if a contract exists between Atos and its customer. A contract exists if collection of consideration is probable, rights to goods or services and payment terms can be identified, and parties are committed to their obligations. Revenue from contracts with customers is recognized either against a contract asset or receivable, before effective payment occurs.

Multiple arrangements services contracts

The Group may enter into multiple-element arrangements, which may include combinations of different goods or services. Revenue is recognized for each distinct good or service which is separately identifiable from other items in the arrangement and if the customer can benefit from it.

Contracts delivered by Infrastructure & Data Management and Business & Platform Solutions Divisions often embed transition and transformation prior to the delivery of recurring services, such as IT support and maintenance.

When transition or transformation activities represent knowledge transfer to set up the recurring service and provide no incremental benefit to the customer and cannot be considered as a separate performance obligation (set up activities), no revenue is recognized in connection with these activities. The costs incurred during these activities are capitalized as contract costs if they create a resource that will be used in satisfying future performance obligations related to the contract and if they are recoverable. They are amortized on a systematic basis over the contractual period. The cash collected for such activities is considered as advance payment, presented as contract liability, and recognized as revenue over the recurring service period. When these activities transfer to the customer the control of a distinct good or service and the customer can benefit from this good or service independently from the recurring services, they are accounted for separately as separate performance obligations and revenues relating to these activities are recognized.

When a single contract contains multiple distinct goods or services, the consideration is allocated between the goods and services based on their stand-alone selling prices. The stand-alone selling prices are determined based on the list prices including usual discounts granted at which the Group sells the goods or services separately. Otherwise, the Group estimates stand-alone selling prices using a cost-plus margin approach.

Principal versus agent

When the Group resells hardware, software and IT services purchased from third-party suppliers, it performs an analysis of the nature of its relationship with its customers to determine if it is acting as principal or as agent in the delivery of the good or service. The Group is a principal if it controls the specified good or service before it is transferred to the customer. In such case, revenue is recognized on a gross basis. If the Group is an agent, revenue is recognized on a net basis (net of supplier's costs), corresponding to any fee or commission to which the Group is entitled. When the Group is providing a significant service of integrating and/or designing the specified good or service, it is acting as a principal in the process of resale. If the specified good or service is distinct from the other services promised to its customer, the Group is acting as a principal notably if it is primarily responsible for the good or service meeting the customer specifications or assumes inventory or delivery risks.

At a point in time versus over time recognition

Revenue is recognized when the Group transfers the control of a good or service to the customer, either at a point in time or over time.

For recurring services, the revenue is recognized over time as the customer simultaneously receives and consumes the benefit provided by the Group's performance as the Group performs. If the Group has a right to invoice a customer at an amount that corresponds directly with its performance to date, the revenue is recognized at that amount. Otherwise, revenue is recognized based on the costs incurred if the entity's efforts are not expensed evenly throughout the period covered by the service.

When the Group builds an asset or provides specific developments, revenue is recognized over time, generally based on costs incurred.

When the Group's performance creates or enhances an asset that the customer controls as the asset is created or enhanced or when the performance does not create an asset with an alternative, use and the Group has an enforceable right to payment for the performance completed to date by the contract and local regulations, revenue is recognized over time, generally based on costs incurred.

Otherwise, revenue is recognized at a point in time.

Customer contracts in a form of a lease

Part of certain service arrangements may qualify as a lease under IFRS 16 if they convey a right to use an asset in return for payments included in the overall contract remuneration. If service arrangements contain a lease, the Group is considered as manufacturer or dealer-lessor regarding its customers. Where the lease transfers the risks and rewards of ownership of the assets to its customers (finance lease), the Group recognizes Revenue representing the selling price of assets held under lease and presents those as contract assets.

Contract costs - Costs to obtain and fulfill a contract

Incremental costs to acquire a multi-year service contracts are capitalized and amortized over the life of the contract.

Transition & Transformation costs that do not represent a separate performance obligation of a contract are capitalized as contract costs if they create a resource that will be used to perform other performance obligations embedded in the contract, are recoverable. Other costs incurred to obtain or fulfill a contract are expensed when incurred.

Statement of Financial Position presentation

Contract assets primarily relate to the Group's rights to consideration for work completed but not yet billed at the reporting date. Invoiced to be issued are presented as part of contract assets. When the rights to consideration are unconditional, they are classified as trade receivables.

Contract liabilities relate to upfront payments received from customers in advance of the performance obligation. Contract costs are presented separately from contract assets. Contract assets and contract liabilities are netted on a contract by contract basis.

Revenue recognition and associated costs on long-term contracts

Total projected contract costs are based on various operational assumptions such as forecast volume or variance in the delivery costs that have a direct influence on the level of revenue and possible forecast losses on completion that are recognized. A provision for onerous contract is booked if the future costs to fulfill a contract are higher than its related benefits.

Financing component

When Atos expects the period between the transfer of goods and services and customer payment to be greater than 12 months, it assesses whether the contract is embedding a financing component granted or received. When significant, interests generated by this financing component are booked separately from revenue.

3.1. Disaggregation of revenue from contracts with customers

Most of revenue generated by IDM & B&PS divisions are recognized over time for fixed price contracts and at a point of time for time & material-based contracts. The Group applies the "cost-to-cost" method to measure progress to completion for fixed price contracts. Most of the BDS Revenue is recognized at a point of time when solutions are delivered except for High Performance Computers solutions when Atos is building a dedicated asset with no alternative use and has right to payment by the contract and local regulation for costs incurred embedding a reasonable margin.

In the following table, revenue from contracts with customers is disaggregated by markets. Disaggregated revenue by Global Business Units and Divisions is disclosed in Group's reportable segments (See Note 2).

(in €million)	**Manufacturing, Retail &Transport**	**Public & Health**	**Financial Services**	**Telcos, media & utilities**	**Total Group**
12 months ended 31 December 2019					
External revenue by market	**4,139**	**3,411**	**2,169**	**1,869**	**11,588**
% of Group revenue	35.7%	29.4%	18.7%	16.1%	100.0%
12 months ended 31 December 2018 *					
External revenue by market	**4,009**	**3,225**	**1,605**	**1,809**	**10,648**
% of Group revenue	37.6%	30.3%	15.1%	17.0%	100.0%

** Figures presented are restated from Worldline activities, in accordance with IFRS 5.*

3.2. Trade accounts and notes receivables

(In €million)	**December 31, 2019**	**December 31, 2018**
Contract assets	1,517	1,489
Trade receivables	1,301	1,471
Contract costs	106	89
Expected credit losses allowances	-66	-84
Net asset value	**2,858**	**2,965**
Contract liabilities	-680	-776
Net accounts receivable	**2,178**	**2,188**
Number of days' sales outstanding (DSO)	**47**	**43**

The average credit period on sale of services is between 30 and 60 days depending on the countries. Main part of the contract assets should be converted in trade receivables in the 12 coming months except for contract assets corresponding to the transfer of IT equipment under lease model and the grant of multi-years right to use licensees. Most of the contract liabilities should be converted in revenue in the coming months. Excluding Worldline, the DSO ratio moved from 46 days to 47 days at the end of December 2019.

Transfer of trade receivables

Atos securitization program of trade receivables has been renewed for 5 years on May 29, 2018 with a maximum amount of receivables sold of € 500 million and a maximum amount of financing reduced from € 200 million to € 100 million. The Group sold with recourse trade receivables for € 108 million on which € 10 million has been received in cash. These trade receivables have not been derecognized from the statement of financial position, because the Group retains substantially all risks and rewards. The amount received on transfer has been recognized as a secured bank loan. The arrangement with the bank is such that the customer remit cash directly to the Group and the Group transfers the collected amount to the bank.

DSO has been positively impacted by the sale of receivables on large customer contracts by 24 days, stable compared to December 2018. As of December 31, 2019, € 873 million of trade receivables were transferred to third parties with conditions of the transfers meeting IFRS 9 requirements, meaning transfer of contractual cash flows and transfer of substantially all risks and rewards are achieved.

Those trade receivables were therefore derecognized in the statement of financial position as of December 31, 2018. The € 873 million included $ 105 million in the US where Atos only sells 90% of the right to cash flows and then derecognizes 90% of the receivables.

The level of trade receivables sold with no recourse to banks with transfer of risks as defined by IFRS 9 remained at the same level than the end of December 31, 2018.

Ageing of net receivables past due

(In €million)	**December 31, 2019**	**December 31, 2018**
1-30 days overdue	90	128
31-60 days overdue	43	42
Beyond 60 days overdue	96	94
Total	**229**	**264**

Movement in expected credit losses allowances

(In €million)	**December 31, 2019**	**December 31, 2018**
Balance at beginning of the year	-84	-122
Impairment losses recognized	-28	-12
Amounts written off as uncollectible	12	27
Impairment losses reversed	-2	-3
Impact of business combination	-1	-7
Reclassification and exchange differences	37	32
Balance at end of the year	**-66**	**-84**

Note 4 Operating items

4.1. Personnel expenses

(In € million)	12 months ended December 31,2019	% Revenue	12 months ended December 31,2018*	% Revenue
Wages and salaries	-4,280	36.9%	-3,919	36.8%
Social security charges	-980	8.5%	-981	9.2%
Tax, training, profit-sharing	-77	0.7%	-36	0.3%
Net (charge)/release to provisions for staff expenses	0	0.0%	1	0.0%
Net (charge)/release of pension provisions	60	-0.5%	73	-0.7%
Total	**-5,277**	**45.5%**	**-4,862**	**45.7%**

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

4.2. Non-personnel operating expenses

(In €million)	12 months ended December 31,2019	% Revenue	12 months ended December 31,2018*	% Revenue
Subcontracting costs direct	-1,892	16.3%	-1,860	17.5%
Hardware and software purchase	-1,154	10.0%	-982	9.2%
Maintenance costs	-626	5.4%	-606	5.7%
Rent expenses	-29	0.3%	-341	3.2%
Telecom costs	-288	2.5%	-292	2.7%
Travelling expenses	-154	1.3%	-128	1.2%
Professional fees	-202	1.7%	-179	1.7%
Others expenses	-247	2.1%	-236	2.2%
Subtotal expenses	**-4,590**	**39.6%**	**-4,624**	**43.4%**
Depreciation of assets	-334	2.9%	-336	3.2%
Depreciation of right-of-use	-336	2.9%	-	-
Net (charge)/release to provisions	23	-0.2%	49	-0.5%
Gains/(Losses) on disposal of assets	-17	0.1%	-9	0.1%
Trade receivables write-off	-12	0.1%	-22	0.2%
Capitalized production	145	-1.3%	123	-1.2%
Subtotal other expenses	**-531**	**4.6%**	**-195**	**1.8%**
Total	**-5,121**	**44.2%**	**-4,819**	**45.3%**

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

4.3. Trade accounts and notes payable

(In €million)	December 31, 2019	December 31, 2018
Trade payables and notes payable	**2,278**	**2,462**
Net advance payments	-31	-37
Prepaid expenses and advanced invoices	-691	-666
Net accounts payable	**1,556**	**1,759**
Number of days' payable outstanding (DPO)	**79**	**97**

4.4. Other current assets

(In €million)	December 31, 2019	December 31, 2018
Inventories	104	133
State - VAT receivables	212	273
Prepaid expenses and advanced invoices	691	666
Other receivables & current assets	529	530
Net advance payments	31	37
Assets linked to intermediation activities	-	1,151
Total	**1,568**	**2,791**

The intermediation activities in 2018 were related to Worldline activities only.

4.5. Other current liabilities

(In € million)	December 31, 2019	December 31, 2018
Employee-related liabilities	355	512
Social security and other employee welfare liabilities	172	206
VAT payables	371	430
Contract liabilities	680	776
Liabilities linked to intermediation activities	-	1,151
Other operating liabilities	310	325
Total	**1,888**	**3,400**

The intermediation activities in 2018 were related to Worldline activities only.

Note 5 Other operating income and expenses

Other Operating Income and Expenses is an Alternative Performance Measure and is defined in section B.4.7.3

Equity-based compensation

Free shares and stock options are granted to management and certain employees at regular intervals. These equity-based compensations are measured at fair value at the grant date using the Black-Scholes model. Changes in the fair value of options after the grant date have no impact on the initial valuation. The fair value of instruments is recognized in "other operating income and expense" on a straight-line basis over the period during which those rights vest, using the straight-line method, with the offsetting credit recognized directly in equity.

In some tax jurisdictions, Group entities receive a tax deduction when stock options are exercised, based on the Group share price at the date of exercise.

In those instances, a deferred tax asset is recorded for the difference between the tax base of the employee services received to date (being the future tax deduction allowed by local tax authorities) and the current carrying amount of this deduction, being nil by definition. Deferred tax assets are estimated based on the Group's share price at each closing date and are recorded in income tax provided that the amount of tax deduction does not exceed the amount of the related cumulative stock option expenses to date. The excess, if any, is recorded directly in the equity.

Employee Share Purchase Plans offer employees the opportunity to invest in Group's shares at a discounted price. Shares are subject to a five-year lock-up period restriction. Fair values of such plans are measured considering:

- the exercise price based on the average opening share prices quoted over the 20 trading days preceding the date of grant;
- the 20 percent discount granted to employees;
- the attribution of free shares for the first subscribed shares according to the matching share plan;
- the consideration of the five-year lock-up restriction to the extent it affects the price that a knowledgeable, willing market participant would pay for that share; and
- the grant date: the date on which the plan and its term and conditions, including the exercise price, is announced to employees.

Fair values of such plans are fully recognized in "Other operating income and expenses" at the end of the subscription period.

The Group has also granted to management and certain employees free share plans. The fair value of those plans corresponds to the value of the shares at the grant date and considers employee turnover during the vesting period as well as the value of the lock-up period restriction when applicable.

Social contributions linked to equity-based compensations are also presented as Other Operating Income and Expenses.

Other operating income and expenses relate to income and expenses that are unusual and infrequent and represented a net expense of € 530 million in 2019. The following table presents this amount by nature:

(In €million)	**12 months ended December 31,2019**	**12 months ended December 31,2018***
Staff reorganization	-100	-76
Rationalization and associated costs	-34	-34
Integration and acquisition costs	-41	-44
Amortization of intangible assets (PPA from acquisitions)	-157	-107
Equity based compensation	-73	-36
Other items	-125	-40
Total	**-530**	**-337**

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

The € 100 million **staff reorganization** expense was mainly the consequence of the adaptation of the Group workforce in several countries. The increase in 2019 came mostly from the specific plan in Germany.

The € 34 million **rationalization and associated costs** primarily resulted from the closure of office premises and data centers consolidation, mainly in North America and France.

Integration and acquisition costs at € 41 million mainly relate to the integration costs of Syntel to generate synergies while the other costs relate to the migration and standardization of internal IT platforms from earlier acquisitions.

The 2019 amortization of intangible assets recognized in the **Purchase Price Allocation** (PPA) of € 157 million was mainly composed of:

- € 67 million of Syntel customer relationships and technologies amortized over 12 years starting November 1, 2018;
- € 22 million of SIS customer relationships amortized over 12 years starting July 1, 2011;
- € 20 million of Xerox ITO customer relationships amortized over 6 to 12 years starting July 1, 2015;
- € 17 million of Unify customer relationships and technologies amortized over 2 to 10 years starting February 1, 2016;
- € 16 million of Bull customer relationships and patents amortized over respectively 9 years and 7 to 10 years starting September 1, 2014.

In 2019, the amount of amortization of intangible assets increased from € 107 million to € 157 million, mainly due to the amortization in a full year basis of the Syntel Purchase Price Allocation (€ 67 million in 2019 to be compared with € 11 million over 2 months in 2018).

The **equity-based compensation** expense amounted to € 73 million compared to € 36 million in 2018 which reflected the lower performance and the decrease in the number of shares granted in 2018.

In 2019, **other items** increased significantly from € 40 million to € 125 million including exceptional expenses:

- At the time of the distribution of Worldline shares in May, the remaining Worldline shares were valued at the opening price on May 7, 2019 for € 54.7. Since that date the Worldline participation was accounted for under equity method. The transactions made in November were at € 53.0 per share leading to a loss in the Group consolidated accounts as follows:
    - **Accelerated Book building Offering of Worldline shares (ABO)**. The Accelerated Book building Offering of Worldline shares on the market led to a net loss on disposal of € 46 million, net of costs of disposal. The transaction generated a net gain in the statutory accounts of Atos SE;
    - **Transfer of £ 198 million (€ 230 million) of Worldline shares to Atos UK Pension Scheme.** Atos has decided to fund its UK Pensions schemes with Worldline shares. This non-cash transaction will prevent Atos from any additional funding in cash for the next 15 years. This transaction led to a net loss on disposal of shares of € 7 million. The transaction generated a net gain in the statutory accounts of Atos SE.
- Settlement signed over H2 2019 with a large German customer led to the recognition of a one-time charge of € 23 million.

Equity-based compensation

The € 73 million expense recorded within operating margin relating to equity-based compensation (€ 36 million in 2018) is made up of:

- € 72 million related to free shares plans granted from 2015 until 2019 of which € 6 million of 2019 free shares plans granted;
- € 1 million related to the employee share purchase plan SHARE 2018.

The equity-based compensation plans are detailed by year and by nature as follows:

(In € million)	**12 months ended December 31, 2019**	**12 months ended December 31, 2018***
By years :		
Plans 2019	6	-
Plans 2018	21	2
Plans 2017	29	0
Plan 2016	10	30
Plan 2015	6	6
Plans 2014	-	-2
Total	**73**	**36**
By category of plans :		
Free share plans	72	37
Stock options	0	-1
Employee share purchase plan	1	-
Total	**73**	**36**

** Figures presented are restated from Worldline activities, in accordance with IFRS 5.*

Free shares plans

In 2019, Atos implemented new free shares plans detailed as follows:

	Atos	**Atos**
Grant Date	**October 23, 2019**	**July 24, 2019**
Number of shares granted	12,000	857,743
Share price at grant date (€)	63.6	69.8
Vesting date	October 23, 2022	July 24, 2022
Expected life (years)	3	3
Expected dividend yield (%)	2.07	2.07
Fair value of the instrument (€)	**59.77**	**65.55**
2019 expense recognized *(in € million)*	0	6

Atos free share plans

Rules governing the free share plans in Group Atos (prior to 2018) are as follows:

- To receive the share, the grantee must generally be an employee or a corporate officer of the Group or a company employee related to Atos;
- Vesting is also conditional on both the continued employment condition and the achievement of performance criteria, financial and non-financial ones;
- The financial performance criteria are the following:
  - Group revenue;
  - Group Operating Margin (OM); and
  - Group Free Cash Flow (FCF).
- The vesting period varies according to the plans rules but never exceeds 4.5 years;
- The lock-up period is 0 to 2 years;
- Atos free shares plans are equity-settled.

Following the announcement of the acquisition of Syntel, the Board of Directors replaced the performance criterion on FCF by a criterion based on earning per share (EPS) in respect of the July 25, 2017 free shares plans.

Rules described above applied to 2018 free shares plans are the same except for the FCF criterion replaced by earning per share (EPS).

The performance criteria for 75% of free shares granted as part of July 25, 2017, March 27, 2018 and July 22, 2018 free shares plans have further been modified by the Board of Directors on October 22, 2018 to align with the revised guidance provided to the market. Based on 2018 Group results, the remaining 25% of free shares of the above plans will not be vested.

Main previous plans impacting 2019 consolidated income statement are detailed as follows:

	Atos	Atos
Grant Date	**March 27, 2018**	**July 22, 2018**
Number of shares granted	8,550	891,175
Share price at grant date (€)	90.0	90.0
Vesting date	March 26, 2021	July 21, 2021
Expected life (years)	3	3
Expected dividend yield (%)	1.2	1.2
Fair value of the instrument (€)	**87.08**	**87.08**
2019 expense recognized *(in € million)*	0	17

	Atos	Atos	Atos	Atos
Grant Date	**July 28, 2015 Foreign plan**	**July 26, 2016**	**July 24, 2017**	**July 25, 2017**
Number of shares granted	510,000	947,884	38,738	777,910
Share price at grant date (€)	69.70	86.05	123.15	90.00
Vesting date	January 2, 2020	July 26, 2019	July 24, 2020	July 25, 2020
Expected life (years)	4.5	3	3	3
Lock-up period (years)	-	-	-	-
Risk free interest rate (%)	-	-	-	-
Borrowing-lending spread (%)	-	-	-	-
Expected dividend yield (%)	1.2	1.2	1.2	1.2
Fair value of the instrument (€)	**65.89**	**83.00**	**118.80**	**88.12**
2019 expense recognized *(in € million)*	6	10	-2	31

Stock options plans

In 2019, Atos implemented new Stock option plan detailed as follows:

Number of options issued	209,200
Share price at grant date (€)	77.9
Strike price (€)	80.1
Vesting date	July 24, 2022
Expected maturity of the plan (years)	3 years
Risk free interest rate (%)	-0.44
Expected dividend yield (%)	2.07
Fair value of the instument (€)	**6.67**
Expense recognized in 2019 (in € million)	**0**

Outstanding stock options plans

The change in outstanding share options for **Atos SE** during the period was the following:

(In € million)	12 months ended December 31,2019		12 months ended December 31,2018	
	Number of shares	Weighted average strike price (in €)	Number of shares	Weighted average strike price (in €)
Outstanding at the beginning of the year	**25,467**	**52.2**	**406,707**	**34.0**
Granted during the year	209,200	77.9	-	-
Forfeited during the year	-40,300	77.9	-	-
Exercised during the year	-25,467	52.2	-377,204	34.0
Expired during the year	-	-	-4,036	27.2
Outstanding at the end of the year	**168,900**	**77.9**	**25,467**	**52.2**
Exercisable at the end of the year, below year-end stock price	-	-	**25,467**	**52.2**

(*) Year-end stock price: € 74.32 at December 31, 2019 and € 71.48 at December 31, 2018.

Employee share purchase plan Share 2018

In December 2018, the Group implemented a new employee share option plan called Share detailed as follows:

SHARE 2018 was open to employees throughout the Group. This new plan offered eligible employees the purchase of shares at a 20% discount with a five-year lock-up period restriction and the attribution of free shares for the first 2 subscribed shares.

As a consequence of the plan, the Group issued 263,518 shares at a reference share price of € 74.4 (before the 20% discount application).

The cost related to SHARE 2018 takes into account the effect of the five-year lock-up period restriction calculated based on the following parameters:

	SHARE 2018
Number of shares issued	263,518
Share price at grant date (€)	68.8
Percentage of discount	20%
Lock-up period	5 years
Risk free interest rate (%)	-0.003%
Borrowing-lending spread (%)	5%
Expense recognized in 2019 (in € million)	**1**

Note 6 Financial assets, liabilities and financial result

6.1. Financial result

Net financial expense amounted to € 208 million for the period (compared to € 67 million prior year) and was composed of a net cost of financial debt of € 64 million and non-operational financial costs of € 144 million.

Net cost of financial debt

(In €million)	12 months ended December 31,2019	12 months ended December 31,2018*
Net interest expenses	**-64**	**-30**
Interest on obligations under finance leases	-	-1
Gain/(loss) on disposal of cash equivalents	2	1
Gain/(loss) on interest rate hedges of financial debt	-2	-
Net cost of financial debt	**-64**	**-30**

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

Net cost of financial debt was € 64 million (compared to € 30 million in 2018) and resulted from the following elements:

- the average gross borrowing of € 5,413 million compared to € 3,330 million in 2018 bearing an average expense rate of 1.55% compared to 1.25% last year. The average gross borrowing expenses were mainly explained by:
  - the used portion of the syndicated loan combined with the Negotiable European Commercial Papers (NEU CP) and the Negotiable European Medium-Term Note program (NEU MTN) for an average of € 1,478 million (compared to an average of € 1,239 million in 2018) bearing an effective interest rate of 0.21%, benefiting from the attractive remuneration applied to the NEU CP;
  - a € 600 million bond issued in July 2015 bearing a coupon rate of 2.375%;
  - a € 300 million bond issued in October 2016 bearing a coupon rate of 1.444%;
  - a € 700 million bond issued in November 2018 bearing a coupon rate of 0.750%;
  - a € 750 million bond issued in November 2018 bearing a coupon rate of 1.750%;
  - a € 350 million bond issued in November 2018 bearing a coupon rate of 2.500%;
  - a $ 1,900 million 3 and 5-year term loan signed in October 2018 drawn in USD and EUR at variable rate, fully repaid on November 2019 bearing an average effective interest rate of 2.59%; Outstanding balances before repayment was $ 1,045 million and € 513 million;
  - other sources of financing, including securitization, for an average of € 50 million, bearing an effective interest rate of 3.12%.
- the average gross cash varied from € 1,313 million in 2018 to € 1,441 million in 2019 bearing an average income rate of 1.58% compared to 0.80% in 2018.

Other financial income and expenses

(In €million)	12 months ended December 31,2019	12 months ended December 31,2018*
Foreign exchange income/(expenses)	-3	5
Fair value gain/(loss) on forward exchange contracts held for trading	-1	-1
Change gain/(loss) on derivative instrument	-54	-
Interest on lease liability	-27	-
Other income/(expenses)	-59	-41
Other financial income and expenses	**-144**	**-36**
Of which:		
- other financial expenses	-162	-75
- other financial income	18	38

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

Non-operational financial costs amounted to € 144 million compared to € 36 million in 2018 and were mainly composed of:

- variance for € 54 million related to the OEB derivative at fair value driven by the Worldline share price evolution between the issuance in November and December 31, 2019 (as per IFRS 9) while the underlying Worldline shares were accounted for under equity method (as per IAS 28);
- pension related interest (broadly stable compared to € 27 million expense in 2018). The pension financial cost represented the difference between interest costs on pension obligations and interest income on plan assets;
- lease liability interest of € 27 million following IFRS 16;
- net foreign exchange loss (including hedges) of € 4 million versus a net foreign exchange gain (including hedges) of € 4 million in 2018.

6.2. Cash and cash equivalents

Cash and cash equivalents include cash at bank and financial instruments such as money market securities. Such financial instruments are readily convertible to a known amount of cash and are subject to an insignificant risk of change in value. They are held for the purpose of meeting short-term cash commitments and have a short maturity, in general three months or less from the date of acquisition. Some instruments, such as term deposits, that have at inception a longer maturity but provide for early withdrawal and a capital guarantee may also be classified as cash equivalents under certain circumstances. Money market securities are recognized at their fair value. Changes in fair value are recorded in the income statement under "Other financial income and expenses".

Cash and cash equivalents are measured at their fair value through income statement.

For entities having subscribed to the Group cash pooling agreement, the cash/debt statement of financial position positions which are linked to this agreement are mutualized and only the net position is presented in the consolidated statement of financial position.

The cash and cash equivalents are held with bank and financial institutions counterparties, majority of which are rated A- to AA-. Impairment on cash and cash equivalent is calculated based on S&P default probability.

(In €million)	December 31, 2019	December 31, 2018
Cash in hand and short-term bank deposit	2,363	2,506
Money market funds	50	40
Total	**2,413**	**2,546**

Depending on market conditions and short-term cash flow expectations, Atos from time to time invests in money market funds or bank deposits with a maturity period not exceeding three months.

6.3. Non-current financial assets

Investments in non-consolidated companies

The Group holds shares in companies without exercising significant influence or control. Investments in non-consolidated companies are recognized at their fair value. For listed shares, fair value corresponds to the share price at the closing date.

(In €million)		December 31, 2019	December 31, 2018
Pension prepayments	Note 11	231	116
Fair value of non-consolidated investments net of impairment		4	82
Other*		116	123
Total		**351**	**321**

** "Other" includes loans, deposits, guarantees and up-front and underwriting fees related to past acquisitions amortized over the duration of the debt instrument*

Main changes in Fair Value of non-consolidated investments net of impairment are mainly related to the € -78 million change non-consolidated investments resulted from the deconsolidation of Worldline.

6.4. Financial liabilities

Borrowings

Borrowings are recognized initially at fair value, net of debt issuance costs. Borrowings are subsequently measured at amortized cost. The calculation of the effective interest rate considers interest payments and the amortization of the debt issuance costs.

Debt issuance costs are amortized in financial expenses over the life of the loan though the use of amortized cost method. The residual value of issuance costs for loans derecognized is fully expensed on the date of derecognition.

Bank overdrafts are recorded in the current portion of borrowings.

Derivative

Derivative instruments are recognized as financial assets or liabilities at their fair value. Any change in the fair value of these derivatives is recorded in the income statement as a financial income or expense, except when they are eligible for hedge accounting.

The market value of derivative financial instruments was provided by the financial institutions involved in the transactions or calculated using standard valuation methods that factor in market conditions as of the end of the reporting period.

The Group has identified three financial instrument categories based on the two valuation methods used (listed prices and valuation techniques). In accordance with IFRS, this classification is used as a basis for presenting the characteristics of financial instruments recognized in the statement of financial position at fair value through income as of the end of the reporting period:

- Level 1 category: financial instruments quoted on an active market;
- Level 2 category: financial instruments whose fair value is determined using valuation techniques drawing on observable market inputs;
- Level 3 category: financial instruments whose fair value is determined using valuation techniques drawing on non - observable inputs (inputs whose value does not result from the price of observable market transactions for the same instrument or from observable market data available as of the end of the reporting period) or inputs which are only partly observable.

Issuance of a € 500 million bond exchangeable in Worldline shares

Atos issued on November 2019 bonds due in 2024 for an aggregate nominal amount of € 500 million. The bonds will be exchangeable in Worldline shares, at a premium of 35% above the placing price of the Equity placement. The bonds will not bear interest and have a maturity of 5 years (except in case of early redemption). The bonds have been offered at a price of 108.875% of the principal amount and will be redeemed at their principal amount of maturity, corresponding to an annual yield to maturity of -1.7%.

In accordance with IFRS 9, a derivative liability of € 52 million has been booked corresponding to the value of a call option on Worldline shares (Level 2 category). The net change in the fair value of the derivative liability between November and December 31, 2019 of € 54 million has been recorded in income statement as part of financial result leading to a total value in the consolidated statement of financial position of € 107 million.

The call option derivative component value is indexed to Worldline shares price and other criteria. As of December 31, 2019, and at issue date, the reference exchange price of Worldline shares was set at €71.55.

(In €million)	December 31, 2019			December 31, 2018		
	Current	Non-current	Total	Current	Non-current	Total
Bonds	600	2,100	2,700	-	2,700	2,700
Optional exchangeable bond	-	500	500	-	-	-
Banks loans and commercial papers	755	50	805	809	1,556	2,365
Securitization	10	-	10	6	-	6
Finance leases	-	-	-	6	9	15
Other borrowings	133	1	134	216	116	332
Total borrowings	**1,498**	**2,651**	**4,149**	**1,037**	**4,381**	**5,418**

Borrowings in currencies

The carrying amounts of the Group borrowings were denominated in the following currencies:

(In € million)	EUR	Other currencies	Total
December 31, 2019	**3,431**	**718**	**4,149**
December 31, 2018	3,940	1,477	5,418

Value and effective interest rate of financial debt

The fair value of bank loans, which are primarily composed of variable interest rate loans, is considered to be equal to carrying value. For other elements of borrowings, carrying value is considered the best estimate of fair value, the difference between the fair value and the carrying value being not material.

Non-current borrowings maturity

(In €million)	2021	2022	2023	2024	>2024	Total
Bonds	-	700	300	-	1,100	2,100
Optional exchangeable bond	-	-	-	500	-	500
Banks loans and NEU CP	-	-	-	-	50	50
Other borrowings	0	0	0	0	0	1
December 31, 2019	**0**	**700**	**300**	**500**	**1,150**	**2,651**

(In €million)	2020	2021	2022	2023	>2023	Total
Bonds	600	-	700	300	1,100	2,700
Banks loans and commercial papers	79	781	0	696	-	1,556
Finance leases	4	3	1	1	1	9
Other borrowings	115	-	1	1	-	116
December 31, 2018	**798**	**784**	**702**	**997**	**1,101**	**4,381**

Assumptions retained regarding the presentation of the maturity of non-current borrowings

The valuation of financial liabilities has been conducted based on:

- exchange rates prevailing as of December 31, 2019; and
- interest rates presented hereafter.

The effective interest rates in 2019 were as follows:

(In €million)	**Carrying value**	**Fair value**	**Effective interest rate**
Bonds	2,700	2,700	1.80%
Optional exchangeable bond	500	500	0.53%
Banks loans and commercial papers	805	805	1.27%
Securitization and Other borrowings	144	144	-
Total borrowings	**4,149**	**4,149**	**-**
Derivative liabilities	**107**	**107**	**-**

6.5. Change in net debt over the period

(In €million)	**December 31, 2019**	**December 31, 2018**
Opening net cash/(debt)	**-2,872**	**307**
Net cash / (debt) discontinued operations	35	-
New borrowings	-77	-1,758
Bonds and optional exchangable bonds	-514	-1,797
Repayment of long and medium-term borrowings	1,657	287
Variance in net cash and cash equivalents	46	222
Long and medium-term debt of companies sold during the period	-	3
Long and medium-term debt of companies acquired during the period	-3	-103
Impact of exchange rate fluctuations on net long and medium-term debt	-14	-34
Profit-sharing amounts payable to French employees transferred to debt	0	1
Other flows related to financing activities	6	0
Closing net cash/(debt)	**-1,736**	**-2,872**

(in €million)	**December 31, 2019**	**December 31, 2018**
Cash and cash equivalents	2,413	2,546
Overdrafts	-79	-168
Total net cash and cash equivalents	**2,334**	**2,378**

Variance in net cash and cash equivalents include net long-term investments for € 619 million detailed as follows:

Net long-term investments

(in € million)	12 months ended December 31,2019	12 months ended December 31,2018*
Amounts paid for acquisitions and long-term investments		
Pursuit Healthcare and Healthcare companies	4	-
Syntel	-	-2,927
Air-Lynx	-1	-4
IDnomic	-38	-
X-Perion	-3	-
Upfront and underwritting fees following Syntel acquisition	-	-31
Deposit	-11	-5
Other	-4	-4
Total amounts paid for acquisitions and long-term investments	**-54**	**-2,972**
Cash and cash equivalents of companies purchased during the period		
Siemens Convergence Creators (CVC)	-	10
Syntel	-	-188
Air-Lynx	-	-1
IDnomic	5	-
X-Perion	-	-
Other	-	0
Total cash and cash equivalents of companies purchased during the period	**5**	**-179**
Proceeds from disposals of financial investments		
Sale of Worldline shares	657	-
Alpha Cloud	-	3
Deposit	5	6
Other	8	2
Total proceeds from disposals of financial investments	**670**	**11**
Cash and cash equivalents of companies sold during the period		
Other	-1	-
Total Cash and cash equivalents of companies sold during the period	**-1**	**-**
Dividend received from entities consolidated by equity method	-	1
Total dividend received from entities consolidated by equity method	**-**	**1**
Net long-term investments	**619**	**-3,139**

** Net long-term investments relating to Worldline for 2018 have been restated in accordance with IFRS5.*

6.6. Breakdown of assets and liabilities by financial categories

The book value of financial assets corresponds to their fair value.

As at December 31, 2019 the breakdown of assets was the following:

(In €million)	Loans and receivables at amortized cost	Fair value through other comprehensive income	Fair value through profit and loss	Derivative related assets
Non-current financial instruments	-	-	-	-
Trade accounts and notes receivables	2,858	-	-	-
Other current assets	1,568	-	-	-
Current financial instruments	-	-	1	6
Cash and cash equivalents	2,363	-	50	-
Total	**6,789**	**-**	**51**	**6**

As at December 31, 2018, the breakdown of assets was the following:

(In €million)	Loans and receivables at amortized cost	Fair value through other comprehensive income	Fair value through profit and loss	Derivative related assets
Non-current financial instruments	-	-	-	-
Trade accounts and notes receivables	2,965	-	-	-
Other current assets	2,791	-	-	-
Current financial instruments	-	-	2	10
Cash and cash equivalents	2,506	-	40	-
Total	**8,261**	**-**	**42**	**10**

As at December 31, 2019 the breakdown of liabilities was the following:

(In €million)	Liabilities designated at fair value through profit or loss	Financial Liabilities – Measurement at amortized cost	Derivative related liabilities	Other
Borrowings	-	2,651	-	-
Derivative liabilities		-	107	-
Non-current financial instruments	-	-	2	-
Trade accounts and notes payables	-	2,278	-	-
Current portion of borrowings	-	1,498	-	-
Current financial instruments	-	-	1	-
Total	**-**	**6,427**	**110**	**-**

As at December 31, 2018 the breakdown of liabilities was the following:

(In €million)	Financial Liabilities designated at fair value through profit or loss	Financial Liabilities – Measurement at amortized cost	Derivative related liabilities	Other
Borrowings	-	4,381	-	-
Non-current financial instruments	-	-	3	-
Trade accounts and notes payables	-	2,462	-	-
Current portion of borrowings	-	1,037	-	-
Current financial instruments	-	-	2	-
Total		**7,880**	**5**	**-**

Note 7 Income tax

The income tax charge includes current and deferred tax expenses. Deferred tax is calculated wherever temporary differences occur between the tax base and the consolidated base of assets and liabilities, using the liability method. Deferred tax is valued using the enacted tax rate at the closing date that will be in force when the temporary differences reverse.

In case of a change in tax rate, the deferred tax assets and liabilities are adjusted through the income statement except if those changes relate to items recognized in other comprehensive income or in equity.

Deferred tax assets and liabilities are netted off at the taxable entity level, when there is a legal right to offset. Deferred tax assets corresponding to temporary differences and tax losses carried forward are recognized when they are considered to be recoverable during their validity period, based on historical and forecast information.

Deferred tax liabilities for taxable temporary differences relating to goodwill are recognized to the extent they do not arise from the initial recognition of goodwill.

Deferred tax assets are tested for impairment at least annually at the closing date based on December actuals, business plans and impairment test data.

Measurement of recognized tax loss carry-forwards

Deferred tax assets are recognized on tax loss carry-forwards when it is probable that taxable profit will be available against which the tax loss carry-forwards can be utilized. Estimates of taxable profits and utilizations of tax loss carry-forwards were prepared on the basis of profit and loss forecasts as included in the 3-year business plans (other durations may apply due to local specificities).

7.1. Current and deferred taxes expense

(In €million)	**12 months ended 31 December 2019**	**12 months ended 31 December 2018***
Current tax	-122	-97
Deferred tax	40	95
Total	**-82**	**-1**

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

7.2. Effective tax rate

The difference between the French standard tax rate and the Effective Tax Rate (ETR) is explained as follows:

(In €million)	**12 months ended 31 December 2019**	**12 months ended 31 December 2018***
Profit before tax	452	564
French standard tax rate	34.4%	34.4%
Theoretical tax charge at French standard rate	**-156**	**-194**
Impact of permanent differences	7	23
Differences in foreign tax rates	39	41
Movement on recognition of deferred tax assets	36	111
Equity-based compensation	-24	-18
Change in deferred tax rates	2	-1
Taxes not based on taxable income (mainly CVAE, IRAP, US State income Tax)	-1	7
Withholding taxes	-2	-4
French Tax credit	12	18
Other	3	14
Group tax expense	**-82**	**-1**
Effective tax rate	**18.2%**	**0.2%**

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

The tax charge for 2019 was € 82 million with a profit before tax from continuing operations of € 452 million. The Effective Tax Rate (ETR) was 18.2% compared to 16.2% in 2018 (excluding the recognition of deferred tax assets inherited from Bull acquisition (€ 90 million)). This increase related mostly to the integration in the Group scope of Syntel, which has a higher ETR than average. This effect was similar to the effect that Worldline used to have on Group ETR when it was consolidated as part of the continuing operations. Therefore, the Group ETR remained stable compared to the situation before Worldline deconsolidation and Syntel acquisition.

7.3. Restated effective tax rate

After restating the unusual items, the restated profit before tax was € 1,036 million, restated tax charge of € 246 million and the restated effective tax rate was 23.7%.

(in € million)	12 months ended 31 December 2019	12 months ended 31 December 2018*
Profit before tax	**452**	**564**
Other operating income and expenses	-530	-337
Change loss on derivative instrument	-54	-
Profit before tax excluding unusual items	**1,036**	**900**
Tax impact on unusual items	164	94
Group tax expense	-82	-1
Total of tax excluding unusual items	**-246**	**-95**
Restated effective tax rate	**23.7%**	**10.6%**

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

7.4. Deferred taxes assets and liabilities

(In € million)	December 31, 2019	December 31, 2018
Deferred tax assets	325	459
Deferred tax liabilities	238	421
Net deferred tax	**87**	**38**

7.5. Breakdown of deferred tax assets and liabilities by nature

(In € million)	Tax losses carry forward	Intangible assets recognized as part of PPA	Fixed assets	Pensions	Other	Total
December 31, 2017	**287**	**-139**	**-12**	**245**	**-119**	**262**
Charge to profit or loss for the year	90	32	-17	6	-5	106
Change of scope	2	-379	-2	12	27	-340
Charge to equity	-	-	-	11	4	15
Reclassification	-	-	1	-1	-	-
Exchange differences	-3	-	-1	-	-1	-5
December 31, 2018	**376**	**-486**	**-31**	**273**	**-94**	**38**
Assets held for distribution	-34	185	49	-39	-21	141
Charge to profit or loss for the year	-48	38	-2	-42	94	40
Change of scope	0	-9	-1	-2	-157	-169
Charge to equity	-	-	-	37	2	40
Reclassification	-	9	-5	-3	-	0
Exchange differences	0	-6	3	0	1	-2
December 31, 2019	**294**	**-269**	**13**	**225**	**-175**	**87**

7.6. Tax losses carry forward schedule (basis)

(In € million)	December 31, 2019			December 31, 2018		
	Recog-nized	Unrecog-nized	Total	Recog-nized	Unrecog-nized	Total
2019	-	-	-	3	17	20
2020	2	47	49	7	26	33
2021	3	49	52	2	62	64
2022	1	99	100	2	102	104
2023	2	11	13			
Tax losses available for carry forward for 5 years and more	15	112	127	22	115	137
Ordinary tax losses carry forward	**23**	**318**	**341**	**36**	**322**	**358**
Evergreen tax losses carry forward	**1,053**	**2,196**	**3,249**	**1,207**	**2,542**	**3,749**
Total tax losses carry forward	**1,076**	**2,514**	**3,590**	**1,243**	**2,864**	**4,107**

The countries with the largest tax losses available for carry forward were France (€ 1,550 million), Germany (€ 992 million), The Netherlands (€ 280 million), the United Kingdom (€ 238 million), Brazil (€ 117 million), The United States (€ 107 million), Spain (€ 58 million) and Austria (€ 39 million).

7.7. Deferred tax assets not recognized by the Group

(In €million)	December 31, 2019	December 31, 2018
Tax losses carry forward	665	746
Temporary differences	181	182
Total	**846**	**928**

Note 8 Goodwill and fixed assets

8.1. Goodwill

Goodwill is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interests in the acquiree, and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net of the acquisition-date amounts of the identifiable assets acquired and the liabilities assumed. If, after reassessment, the net of the acquisition-date amounts of the identifiable assets acquired and liabilities assumed exceeds the sum of the consideration transferred, of the amount of any non-controlling interests in the acquiree and of the fair value of the acquirer's previously held interest in the acquiree (if any), the excess is recognized immediately in profit or loss as a bargain purchase gain.

Goodwill is allocated to Cash Generating Units (CGU) for the purpose of impairment testing. Goodwill is allocated to those CGUs that are expected to benefit from synergies of the related business combination and represent the lowest level within the Group at which management monitors goodwill.

A CGU is defined as the smallest identifiable group of assets that generates cash inflows that are largely independent of the cash inflows from other assets or group of assets. CGUs correspond to geographical areas where the Group has operations.

The recoverable value of a CGU is based on the higher of its fair value less costs to sell and its value in use determined using the discounted cash-flows method. When this value is less than its carrying amount, an impairment loss is recognized in the operating income.

The impairment loss is first recorded as an adjustment of the carrying amount of the goodwill allocated to the CGU and the remainder of the loss, if any, is allocated pro rata to the other long-term assets of the unit.

The Cash Generating Units used for the impairment test are not larger than operating segments determined in accordance with IFRS 8 Operating segments.

Goodwill is not amortized and is subject to an impairment test performed at least annually by comparing its carrying amount to its recoverable amount at the closing date based on December actuals and latest 3 year plan, or more often whenever events or circumstances indicate that the carrying amount could not be recoverable. Such events and circumstances include but are not limited to:

- significant deviance of economic performance of the asset when compared with budget;
- significant worsening of the asset's economic environment;
- loss of a major client;
- significant increase in interest rates.

Impairment tests

The Group tests at least annually whether goodwill has suffered any impairment, in accordance with the accounting policies stated below. The recoverable amounts of cash generating units are determined based on value-in-use calculations or on their fair value reduced by the costs of sales. These calculations require the use of estimates.

Further to the first application of IFRS 16, the Group elected for the transitional approach still including the rent expenses outflow in the expected cash flows of the CGUs, netting lease liabilities with other assets' net book values and using the same WACC parameters than in previous periods. The Group will change this approach for 2020 impairment test to fully comply with IAS 36 requirements.

(In €million)	December 31, 2018	Assets held for distribution	Impact of business combi-nation	Exchange differences and other	December 31, 2019
Gross value	9,431	-3,050	115	122	6,617
Impairment loss	-567	1	-	-13	-580
Carrying amount	**8,863**	**-3,049**	**115**	**109**	**6,037**

(In €million)	December 31, 2017	Assets held for distribution	Impact of business combi-nation	Exchange differences and other	December 31, 2018
Gross value	4,956	-	4,488	-13	9,431
Impairment loss	-572	-	-	5	-567
Carrying amount	**4,384**	**-**	**4,488**	**-9**	**8,863**

The impact of business combination in 2019 was related to the acquisition of IDnomic and X-Perion, as well as opening statement of financial position adjustments on Syntel acquisition, mainly related to tax items.

Goodwill is allocated to Cash Generating Units (CGUs) that are then part of one of the operating segments disclosed in Note 2 Segment information as per IFRS 8 requirements. Changes in internal management reporting are applied retrospectively and comparative figures are restated.

A summary of the carrying values of goodwill allocated by CGUs or grouping of CGUs is presented hereafter. Overall, goodwill decreased from € 8,863 million in 2018 to € 6,037 million in 2019 mainly due to the Worldline disposal following the loss of control and to the acquisitions of the year as detailed in Note 1 Changes in the scope of consolidation.

(In € million)	December 31, 2019	December 31, 2018
United Kingdom and Ireland	531	508
France	540	519
Germany	787	785
North America	3,091	2,967
Benelux & The Nordics	439	439
Other countries	649	596
Worldline	-	3,049
Total	**6,037**	**8,863**

The recoverable amount of a CGU is determined based on value-in-use calculations. These calculations use cash flow projections based on financial business plans approved by management, covering a three-year period. They are also based on the following assumptions:

- terminal value is calculated after the three-year period, using an estimated perpetuity growth rate of 2.0% (aligned with 2018). Although sometimes exceeding the long-term average growth rate for the countries in which the Group operates, this rate reflects specifics perspectives of the IT sector; and
- discount rates are applied by CGU based on the Group's weighted average cost of capital and adjusted to consider specific tax rates and country risks relating to each geographical area.

The discount rates used by CGU are presented below:

	2019, Discount rate	2018, Discount rate
United Kingdom and Ireland	8.0%	8.4%
France	8.0%	8.3%
Germany	8.0%	8.3%
North America	8.0%	8.4%
Benelux & The Nordics	8.0%	8.3%
Other countries	between 8% and 9.8%	between 8.3% and 10.9%

Based on the 2019 goodwill impairment test, which was carried out at year-end, no impairment losses were recognized as at December 31, 2019.

An analysis of the calculation's sensitivity to a combined change in the key parameters (operating margin, discount rate and perpetuity growth rate) based on reasonably probable assumptions of variations of +/- 50 bp for each of these parameters was performed and did not identify any probable scenario where the CGU's recoverable amount would fall below its carrying amount.

8.2. Intangible assets

Intangible assets other than goodwill

Intangible assets other than goodwill consist primarily of software and user rights acquired directly by the Group, software, customer relationships and technologies acquired as part of a business combination as well as internally developed IT solutions.

To assess whether an internally generated intangible asset meets the criteria for recognition, the Group classifies the generation of the asset into a research phase and a development phase.

Under IAS 38, no intangible asset arising from research (or from the research phase of an internal project) shall be recognized. Such expenditure is therefore recognized as an expense when it is incurred.

An intangible asset arising from development (or from the development phase of an internal project) shall be recognized if, and only if, an entity can demonstrate all of the following:

- the technical feasibility of completing the intangible asset so that it will be available for use or sale;
- its intention to complete the intangible asset and to use or sell it;
- its ability to use or sell the intangible asset;
- how the intangible asset will generate probable future economic benefits;
- the availability of adequate technical, financial and other resources to complete the development and to use or sell the intangible asset; and its ability to measure reliably the expenditure attributable to the intangible asset during its development.

Development expenditure refers to IT solutions developed for the group's own use, to specific implementation projects for specific customers or innovative technical solutions made available to a group of customers. Development projects are analyzed on a case-by-case basis and the only costs which are capitalized are those attributable to the creation, production and preparation of the asset to be capable of operating in the manner intended by management.

Capitalized development expenditure is accounted for at cost less accumulated depreciation and any impairment losses. It is amortized on a straight-line basis over a useful life between 3 and 12 years, for which two categories can be identified:

- for internal software development with fast technology serving activities with a shorter business cycle and contract duration, the period of amortization will be between 3 and 7 years, the standard scenario being set at 5 years in line with the standard contract duration;
- for internal software development with slow technology obsolescence serving activities with a long business cycle and contract duration, the period of amortization will be between 5 and 12 years with a standard scenario of 7 years. It is typically the case for large mutualized payment platforms.

An intangible asset related to the customer relationships and backlog brought during a business combination is recognized as customer relationships. The value of this asset is based on assumptions of renewal conditions of contract and on the discounted flows of these contracts. This asset is amortized on an estimation of its average life.

The value of the developed technology acquired is derived from an income approach based on the relief from royalty method. This method relies on (i) assumptions on the obsolescence curve of the technology and (ii) the theoretical royalty rate applicable to similar technologies, to determine the discounted cash flows expected to be generated by this technology over their expected remaining useful life. The developed technology is amortized on an estimation of its average life. The cost approach may also be implemented as a secondary approach to derive an indicative value for consistency purposes. This method relies on assumptions of the costs that should be engaged to reproduce a similar new item having the nearest equivalent utility as the asset being valued. On the contrary, if technology is believed to be the most important driver for the business, an Excess Earning method could also be implemented.

Intangible assets are amortized on a straight-line basis over their expected useful life, generally not exceeding 5 to 7 years for internally developed IT solutions in operating margin. Customer relationships, patents, technologies and trademarks acquired as part of a business combination are amortized on a straight-line basis over their expected useful life, generally not exceeding 19 years; any related depreciation is recorded in other operating expenses.

(In €million)	Customer relationships	Trademarks, Software and licences	Other intangible assets	Total
Gross value				
December 31, 2018	**1,898**	**854**	**1,309**	**4,061**
Assets held for distribution	-585	-177	-827	-1,590
Additions	-	110	8	118
Impact of business combinations	-	-	11	11
Intangible assets recognized as part of a Purchase Price Allocation	10	-	-	10
Capitalized costs	-	-	84	84
Disposals	-3	-28	-21	-52
Exchange differences and others	39	37	-30	46
December 31, 2019	**1,358**	**796**	**534**	**2,689**
Accumulated depreciation				
December 31, 2018	**-475**	**-396**	**-377**	**-1,248**
Assets held for distribution	40	153	304	496
Amortization charge for the year	-	-12	-36	-47
recognized as part of a Purchase Price Allocation	-120	-34	-2	-157
Amortization of capitalized costs	-	-	-56	-56
Disposals	1	18	14	34
Exchange differences and others	-15	-28	6	-36
December 31, 2019	**-568**	**-299**	**-146**	**-1,013**
Net value				
December 31, 2018	**1,422**	**458**	**933**	**2,813**
December 31, 2019	**790**	**497**	**388**	**1,675**

(In €million)	Customer relationships	Trademarks, Software and licences	Other intangible assets	Total
Gross value				
December 31, 2017	**893**	**759**	**648**	**2,300**
Additions	-	101	5	106
Impact of business combinations	-	-	14	14
Intangible assets recognized as part of a Purchase Price Allocation	980	7	557	1,544
Capitalized costs	-	-	117	117
Disposals	-	-21	-12	-34
Exchange differences and others	24	9	-19	14
December 31, 2018	**1,898**	**854**	**1,309**	**4,061**
Accumulated depreciation				
December 31, 2017	**-354**	**-347**	**-289**	**-991**
Amortization charge for the year	-24	-28	-23	-74
Amortization of intangible assets recognized as part of a Purchase Price Allocation	-89	-36	-4	-128
Amortization of capitalized costs	-	-	-81	-81
Disposals	1	17	14	32
Exchange differences and others	-9	-2	6	-5
December 31, 2018	**-475**	**-396**	**-377**	**-1,248**
Net value				
December 31, 2017	**539**	**412**	**359**	**1,309**
December 31, 2018	**1,422**	**458**	**933**	**2,813**

Following the distribution in kind of Worldline shares on May 7, 2019, the Group has no more control on Worldline, but a significant influence on Worldline. A purchase price allocation has been performed for the part of the business which is still held by the Group and former purchase price allocation reversed have been presented in "Assets held for distribution" due to Worldline deconsolidation.

The Group share of Worldline net contributive result since May 1, 2019 is presented in the Group 2019 consolidated income statement in "Share of net profit/(loss) of associates". The new intangible assets generated by the purchase price allocation exercise are amortized on the same line.

The 2019 amortization of intangible assets recognized in the **Purchase Price Allocation** (PPA) of € 157 million was mainly composed of:

- € 67 million of Syntel customer relationships and technologies amortized over 12 years starting November 1, 2018;
- € 22 million of SIS customer relationships amortized over 12 years starting July 1, 2011;
- € 20 million of Xerox ITO customer relationships amortized over 6 to 12 years starting July 1, 2015;
- € 17 million of Unify customer relationships and technologies amortized over 2 to 10 years starting February 1, 2016;
- € 16 million of Bull customer relationships and patents amortized over respectively 9 years and 7 to 10 years starting September 1, 2014;

In 2019, the amount of amortization of intangible assets recognized in the **Purchase Price Allocation** (PPA) increased from € 128 million to € 157 million, mainly due to the amortization in a full year basis of the Syntel Purchase Price Allocation (€ 67 million in 2019 to be compared with € 11 million over 2 months in 2018).

The gross book value of customer relationship for € 1,358 million as at December 31, 2019 presented above, included mainly:

- € 544 million relative to the Syntel acquisition in 2018;
- € 357 million relative to the Siemens IT Solutions and Services acquisition in 2011;
- € 151 million relative to the Xerox ITO acquisition in 2015;
- € 109 million relative to the Anthelio acquisition in 2016;
- € 104 million relative to the Unify acquisition in 2016.

8.3. Tangible assets

Tangible assets are recorded at acquisition cost. They are depreciated on a straight-line basis over the following expected useful lives:

- buildings 20 years;
- fixtures and fittings 5 to 10 years;
- computer hardware 3 to 5 years;
- office furniture and equipment 5 to 10 years.

Any gain or loss on disposal of an item of property, plant and equipment is recognized in the income statement.

Impairment of assets

Assets that are subject to amortization are tested for impairment whenever events or circumstances indicate that the carrying amount may not be recoverable. An impairment loss is recognized for the amount by which the asset's carrying value exceeds its recoverable value.

(In €million)	**Land and buildings**	**IT equipments**	**Other tangible assets**	**Total**
Gross value				
December 31, 2018	**465**	**970**	**205**	**1,639**
Assets held for distribution	-68	-411	-52	-531
Additions	32	149	65	246
Impact of business combination	1	1	2	4
Disposals	-113	-173	-30	-316
Exchange differences and others	16	-38	-41	-63
December 31, 2019	**332**	**499**	**149**	**980**
Accumulated depreciation				
December 31, 2018	**-286**	**-548**	**-80**	**-914**
Assets held for distribution	51	306	30	387
Depreciation charge for the year	-29	-146	-14	-190
Eliminated on disposal	98	169	25	291
Exchange differences and others	-5	2	0	-3
December 31, 2019	**-171**	**-217**	**-40**	**-428**
Net value				
December 31, 2018	**179**	**422**	**125**	**725**
December 31, 2019	**162**	**282**	**108**	**552**

(In €million)	**Land and buildings**	**IT equipments**	**Other tangible assets**	**Total**
Gross value				
December 31, 2017	**438**	**1,041**	**171**	**1,650**
Additions	38	247	51	335
Impact of business combination	34	25	44	102
Disposals	-45	-265	-29	-339
Exchange differences and others	1	-77	-33	-109
December 31, 2018	**465**	**970**	**205**	**1,639**
Accumulated depreciation				
December 31, 2017	**-277**	**-592**	**-88**	**-957**
Depreciation charge for the year	-37	-212	-14	-263
Eliminated on disposal	24	210	24	258
Exchange differences and others	4	46	-1	49
December 31, 2018	**-286**	**-548**	**-80**	**-914**
Net value				
December 31, 2017	**161**	**449**	**83**	**693**
December 31, 2018	**179**	**422**	**125**	**725**

The tangible assets of the Group include mainly IT equipment used in production centers, in particular datacenters and software factories. Moreover, Atos policy is to rent its premises. Therefore, the land and building assets include mainly the technical infrastructure of Group datacenters.

Note 9 Leases

Existence of a lease

At inception of a contract, the Group assesses whether a contract is, or countains, a lease. A contract is, or contains, a lease if the contract conveys the right to control the use of an identified asset for a period in exchange of consideration. Lease Liabilities and Right-of-use are recognized at the lease commencement date.

The Group does not recognize short term leases (less than 12 months) and leases for which the underlying asset is of a low value except when those assets are subleased to end customers. Payments under such contracts are registered in the income statement, on a straight-line basis, over the duration of the contract. Future commitments to pay rents are presented as off-balance-sheet commitments.

Lease Liability

The lease liability is initially measured at the present value of the lease payments that are not paid at the commencement date, discounted using a Group's incremental borrowing. Those rates have been determined for all currencies of the Group by geography and by maturity. The incremental borrowing rates are calculated by taking for each currency a reference market index quotation and adding up a spread corresponding to the cost of financing that would be applied by a lender to any subsidiary of Atos Group.

The lease liability is subsequently increased by the interest cost on the lease liability and decreased by lease payments made. It is remeasured when there is a change in the future lease payments arising from a change in an index or rate, a change in estimate of the amount expected to be payable under a residual value guarantee, or changes in the assessment of whether an extension option is reasonably certain to be exercised or a termination option is reasonably certain to be exercised, resulting from a decision of the Group.

Lease right-of-use

The right-of-use asset is initially measured at cost, which comprises the initial amount of the lease liability adjusted for any lease payments made at or before the commencement date, plus any initial direct costs incurred, less any lease incentive received.

Real Estate Leases

The Group leases most of its offices and strategic production sites such as Data Centers. Terms and condition can be very heterogeneous based on nature of the sites and local regulations. Those leases have terms between 2 to 20 years.

The Group is applying judgment to determine the lease term for some Real Estate lease contracts in which it is a lessee and that include renewal or early termination options analyzing whether those sites, mainly offices and data centers, are strategic or not. In most cases, the Group retains the earliest date when the Group can go out from its lease commitment without paying any significant penalty except for French 3/6/9 specific leases where the 9th year is systematically defined as lease term.

IT equipment's and company cars

The Group leases IT equipment's for its own use or to deliver its services to end customers (computers, servers). Those leases are entered for terms between 3 to 5 years.

Deferred tax treatment

Deferred tax is applied to IFRS 16 entries based on local applicable tax rates.

(In € million)	**Land and buildings**	**IT equipments**	**Cars and others**	**Total**
Gross value				
January 1, 2019	**912**	**223**	**71**	**1,206**
Additions	66	167	20	253
Disposals	-15	-44	-2	-61
Exchange differences and others	-20	3	-	-17
December 31, 2019	**943**	**349**	**89**	**1,381**
Accumulated depreciation				
January 1, 2019				
Depreciation charge for the year	-189	-115	-32	-336
Eliminated on disposal	16	24	3	42
Exchange differences and others	-1	-2	-	-3
December 31, 2019	**-174**	**-94**	**-29**	**-297**
Net value				
January 1, 2019	**912**	**223**	**71**	**1,206**
December 31, 2019	**768**	**256**	**60**	**1,084**

In 2019, the "Exchange differences and others" mainly corresponded to the recognition of a sublease receivable related to offices occupied by third parties, reclassified in Non-current financial assets (Note 6.3).

Note 10 Investments in associates accounted for under the equity method

Investments in associates over whose management the parent company directly or indirectly exercises significant influence, without however exercising full or joint control, are accounted for under the equity method. This method consists of recording the Group's share in profit for the year of the associate in the Consolidated Income Statement in "Share of net profit/(loss) of associates".

The Group's share in net assets of the associate is recorded under "Investments in associates accounted for under the equity method" in the Consolidated Statement of Financial Position.

The Group decided to classify all gain or loss on disposal of Investments in associates in Other operating income and expenses.

(In € million)	**December 31, 2018**	**Business combination**	**Disposal**	**Net results**	**Exchange differences and other**	**December 31, 2019**
Worldline	-	2,732	-1,053	45	-	1,724
Other	7	-	-	2	-6	3
Total	**7**	**2,732**	**-1,053**	**47**	**-6**	**1,727**

Following the distribution in kind of Worldline's shares, Atos held 27.3% of Worldline's share capital and 35% of voting rights, subject to a six-month lock-up period. Starting May 1, 2019, the Group has no more control on Worldline, but a significant influence on Worldline. As such, the Group investment in Worldline was from that date presented as part of "Investments in associates accounted for under the equity method" in the 2019 consolidated financial statements.

The amount of € 2,732 million in "business combination" corresponded to the remaining Worldline shares owned by Atos SE, valued at the opening price on May 7, 2019 for a value of € 54.7 per share.
After having distributed 23.5% of Worldline shares to its Shareholders on May 7, 2019, Atos has completed in November 2019:

- the sale of 14.7 million of Worldline shares through an Accelerated Book building Offering (ABO);
- the transfer of £ 198 million (€ 230 million) of Worldline shares to Atos UK Pension Scheme;
- the issuance of € 500 million bond which will be exchangeable into Worldline shares.

These two first transactions led to a net book value of € 1,053 million in November 2019.

After completion of November transactions, Atos voting rights over Worldline amounted to 25.6% and 16.9% of interest percentage. The review of the governance led to the conclusion that Atos still has significant influence over Worldline. As such, the Group continued to consolidate Worldline under Equity method.

Note 11 Pension plans and other long-term benefits

The Group uses actuarial assumptions and methods to measure pension costs and provisions. The value of plan assets is determined based on valuations provided by the external custodians of pension funds and following complementary investigations carried-out when appropriate. The estimation of pension liabilities, as well as valuations of plan assets requires the use of estimates and assumptions.

Employee benefits are granted by the Group through defined contribution and defined benefit plans. Costs relating to defined contribution costs are recognized in the income statement based on contributions paid or due in respect of the accounting period when the related services have been provided by beneficiaries.

The valuation of Group defined benefit obligations is based on a single actuarial method known as the "projected unit credit method". This method relies in particular on projections of future benefits to be paid to Group employees, by anticipating the effects of future salary increases. Its implementation further includes the formulation of specific assumptions which are periodically updated, in close liaison with external actuaries used by the Group.

Plan assets usually held in separate legal entities are measured at their fair value, determined at closing.

From one accounting period to the other, any difference between the projected and actual pension plan obligation and their related assets is combined at each benefit plan's level to form actuarial differences. These actuarial differences may result either from changes in actuarial assumptions used, or from experience adjustments generated by actual developments differing, in the accounting period, from assumptions determined at the end of the previous accounting period. All actuarial gains and losses on post-employment benefit plans generated in the period are recognized in "other comprehensive income".

Benefit plan costs are recognized in the Group's operating income, except for interest costs on obligations, net of expected returns on plans assets, which are recognized in "other financial income and expenses".

The total amount recognized in the Group statement of financial position in respect of pension plans was € 972 million at December 31, 2019 (excluding Worldline) compared to € 1,197 million at December 31, 2018 (including € 110 million for Worldline). The total amount recognized for other longer-term employee benefits was € 50 million (excluding Worldline) compared to € 71 million at December 31, 2018 (including € 7 million for Worldline).

(In € million)	**December 31, 2019**	**December 31, 2018**
Amounts recognized in financial statements consist of :		
Prepaid pension asset	231	116
Accrued liability – pension plans [a]	-1,203	-1,314
Total Pension plan	**-972**	**-1,197**
Accrued liability – other long-term employee benefits [b]	-50	-71
Total accrued liability [a] + [b]	**-1,252**	**-1,385**

Pension plans

The Group's pension obligations are located predominantly in the United Kingdom (52% of Group total obligations), Germany (30%), US (6%), France (5%) and Switzerland (5%).

Characteristics of significant plans and associated risks

In the United Kingdom, these obligations are generated by legacy defined benefit plans, the majority of which have been closed to further accrual or new entrants. The plans are final pay plans and are subject to the UK regulatory framework where funding requirements are determined by an independent actuary based on a discount rate reflecting the plan's expected return on investments. Recovery periods are agreed between the plans' trustees and the sponsoring companies and may run up to 20 years if appropriate securities are provided by sponsors. The majority of plans are governed by a sole independent trustee.

The current asset allocation across United Kingdom plans is 78% fixed income, 22% equities and other assets and may vary depending on the particular profile of each plan. The interest rate and inflation exposures are cautiously managed through investment in Gilts, Indexed-Linked and interest rate swaps. The fixed income allocation comprises a significant exposure to investment grade credits and the equity allocation is well diversified geographically.

The plans do not expose the Group to any specific risks that are unusual for these types of benefit plans. Typical risks include, increase in inflation, longevity and a decrease in discount rates and adverse investment returns.

In Germany the majority of the liabilities relate to pension entitlements that transferred to the Group with the acquisition of SIS in 2011 and Unify in 2016. The plans cover multiple legal entities in Germany and are subject to the German regulatory framework, which has no funding requirements, but does include compulsory insolvency insurance (PSV). The plans are partially funded however, using a Contractual Trust Agreement (CTA). The CTA is governed by a professional independent third party. The investment strategy is set by the Investment Committee composed of employer representatives. The asset allocation related to the largest German schemes is 65% fixed income, 24% return seeking assets and other assets and 11% property. The asset allocation related to the other scheme is more in line with the lower interest rate sensitivities of the schemes and are predominantly invested in investment grade credits and, to a lesser extent, in balanced funds and European high yield.

In Switzerland, the obligations are generated by legacy defined benefit plans, exceeding the minimum benefit requirements under Swiss law (BVG). Pension contributions are paid by both the employees and the employer and are calculated as a percentage of the covered salary. The rate of contribution depends on the age of the employee. At retirement, the employees' individual savings capital is multiplied by the conversion rate, as defined by the pension fund regulations, and can be paid out as either a lifetime annuity or a lump-sum payment. In the event of disability, the pension plan pays a disability pension until ordinary retirement age.

The Group obligations are also generated by Qualified and Unqualifed Pension plans in the USA and, to a lesser extent, by legal or collectively bargained end of service or end of career benefit plans. The Group obligations with respect to post-employment healthcare benefits are not significant.

Atos recognized all actuarial gains and losses and asset ceiling effects generated in the period in "Other comprehensive income".

Events in 2019

Since the distribution of Worldline shares by Atos in 2019, Worldline has been consolidated under Equity method in Atos consolidated financial statement. That led to a decrease in the net pension liabilities of € 110 million as at January 1, 2019 (a decrease in the pension obligations of € 536 million and a decrease in plan assets of € 426 million).

In November 2019, Atos merged three Defined Benefit pension schemes together, with transfer of assets and liabilities into a newly Scheme (the Atos UK 2019 Pension Scheme). Members of those plans are either deferred or pensioner members. The deficit at the date of the merger is expected to be around £ 265 million. An agreement has been reached with the Trustee of the new Scheme to arrange a one-off contribution of £ 198 million (€ 230 million) through the distribution of Worldline share. This non-cash transaction will prevent Atos from any additional funding in cash for the next 15 years, subject to ensuring compliance with UK pension funding regulations.

Twice this year, Atos UK Ltd offered to some of the current active members of the Atos 2011 Pension Scheme, a Bridging Pension Option (BPO). This option gives members the opportunity to give up some of their pension rights to be received after State Pension Age (SPA) as a counterpart of temporary pension uplift when retiring from the scheme up to their SPA. This led to a reduction in obligation and operating expenses of € 10 million, including actuarial, legal and other project costs.

In France, the Occupational Pension plan offered to Executive Committee members has been frozen as a result of the “Loi PACTE” act, implementing in the French regulation parts of the EU directive related to pension accrual portability. The French government clarified via the Ordinance of July 3, 2019 how those new rules apply. Defined Benefit Pension plans are closed to new entrants starting July 4, and no additional benefit accruals are allowed from January 1, 2020 onwards. As a consequence of this new legal framework, upon recommendation of the Nomination and Remuneration Committee, the Board of Directors decided on December 16, 2019 that the new CEO will no longer be eligible to the Occupational Pension plan offered to Executive Committee members. Besides, former Chairman and CEO thierry Breton, who left Atos on October 31, 2019, and settled his Defined Benefit pension accrued rights, waived his pension supplement that he could be entitled to, during his mandate period at the European Commission. All these impacts are treated as plan amendment under IAS19. The positive impact of it has been recognized as part of operating margin in the second half of the year for € 12 million.

(In € million)	**December 31, 2019**	**December 31, 2018**
Amounts recognized in financial statements consist of :		
Prepaid pension asset	231	116
Accrued liability – pension plans	-1,203	-1,314
Net amounts recognized – Total	**-972**	**-1,197**
Components of net periodic cost		
Service cost (net of employees contributions)	51	57
Past service cost, settlements	-46	-41
Administration costs	2	4
Operating expense	**8**	**20**
Interest cost	104	103
Interest income	-74	-79
Financial expense	**30**	**24**
Net periodic pension cost – Total expense/(profit)	**37**	**44**
Change in defined benefit obligation		
Total Defined Benefit Obligation at January 1st	**4,901**	**4,735**
Assets held for distribution	-536	14
Exchange rate impact	138	-14
Service cost (net of employees contributions)	51	57
Interest cost	104	103
Past service cost, Settlements	-51	-42
Business combinations/(disposals)	-	330
Employees contributions	7	9
Benefits paid	-183	-184
Actuarial (gain)/loss - change in financial assumptions	454	-124
Actuarial (gain)/loss - change in demographic assumptions	-45	-12
Actuarial (gain)/loss - experience results	16	29
Reclassification	0	-
Defined benefit obligation at December 31st	**4,855**	**4,901**

The weighted average duration of the liability is about 16 years.

(In € million)	December 31, 2019	December 31, 2018
Change in plan assets		
Fair value of plan assets at January 1st	**3,704**	**3,557**
Assets held for distribution	-426	-7
Exchange rate impact	131	-15
Actual return on plan assets	364	-56
Employer contributions	33	46
Benefits paid by the funds	-151	-146
Settlements	-5	-2
Business combinations/(disposals)	-	322
Employees contributions	7	9
Administration costs	-3	-4
Transfer of Worldline shares to Atos UK Pension Scheme	230	-
Fair value of plan assets at December 31st	**3,883**	**3,704**
Reconciliation of prepaid/(accrued) Benefit cost		
Funded status	-972	-1,197
Any other amount not recognized (asset ceiling limitation)	-	-1
Prepaid/(accrued) pension cost	**-972**	**-1,197**
Reconciliation of net amount recognized (all plans)		
Net amount recognized at beginning of year	**-1,197**	**-1,179**
Assets held for distribution	110	-11
Net periodic pension cost	-37	-44
Benefits paid by employer	32	39
Employer contributions	33	46
Business combinations/(disposals)	-	-6
Amounts recognized in Other Comprehensive Income	-134	-39
Other (exchange rate)	-7	-1
Transfer of Worldline shares to Atos UK Pension Scheme	230	-
Reclassification	-1	-2
Net amount recognized at end of year	**-972**	**-1,197**

The development in the main countries was as follows:

(In € million)	UK schemes	German schemes	Other schemes
Reconciliation of net amount recognized in main plans:			
Net amount recognized at beginning of year	**-60**	**-719**	**-418**
Assets held for distribution	6	60	44
Net periodic pension cost	-5	-15	-17
Benefits paid by employer & employer contributions	25	14	26
Business combinations / disposals	-	-	-
Amounts recognized in Other Comprehensive Income	-43	-70	-21
Transfer of Worldline shares to Atos UK Pension Scheme	230		
Other (exchange rate and reclassification)	-3	0.33	-5
Net amount recognized at end of year	**151**	**-730**	**-393**
Defined benefit obligation at December 31st	-2,472	-1,444	-940
Fair value of plan assets at December 31st	2,622	714	547
Asset ceiling limitation at December 31st	-	-	-
Net amount recognized at end of year	**151**	**-730**	**-393**

Actuarial assumptions

Group obligations are valued by independent actuaries, based on assumptions that are periodically updated.

These assumptions are set out in the table below:

	United Kingdom		Eurozone		Switzerland		USA	
	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018	December 31, 2019	December 31, 2018
Discount rate	2.10%	2.90%	0,8% ~ 1,3%	1.6% ~ 2.05%	0.25%	0.75% ~ 0.8%	3.00%	4.00%
Inflation assumption	RPI: 2.95% CPI: 1.95%	RPI: 3.20% CPI: 2.20%	1.45%	1.45%	na	na	na	na

The inflation assumption is used for estimating the impact of indexation of pensions in payment or salary inflation based on the various rules of each plan.

Sensitivity of the defined benefit obligations of the significant plans to the discount rate and inflation rate assumptions is as follows:

	Discount rate +25bp	Inflation rate +25bp
United Kingdom main pension plans	-4.7%	+3.6%
German main pension plans	-3.7%	+2.5%

These sensitivities are based on calculations made by independent actuaries and do not include cross effects of the various assumptions, they do however include effects that the inflation assumption would have on salary increase assumptions for the United Kingdom.

Plan assets

Plan assets were invested as follows:

	December 31, 2019	December 31, 2018
Equity	15%	16%
Bonds/Interest Rate Swaps	66%	64%
Real Estate	7%	8%
Cash and Cash equivalent	2%	3%
Other	10%	9%

Of these assets, 88% is valued on market value, 10% relates to property, private equity and infrastructure investments where valuations are based on the information provided by the investment managers and 2% relates to insurance contracts.

A significant part of the Bonds and Interest Rate Swaps are part of the interest rate hedging program operated by the Atos United Kingdom pension plans, which aims to hedge a significant portion of funding liabilities. None of the plans are hedged for longevity risks.

Atos securities or assets used by the Group are not material.

Situation of the United Kingdom pension funds and impact on contribution for 2020

The Group expects to contribute € 8 million to its United Kingdom schemes next year versus € 25 million in 2019, as a result of the good level of funding of the two main schemes at the end of 2019.

Prepaid pension situations on statement of financial position

The net asset of € 231 million mostly relates to two schemes in the United Kingdom and is supported by appropriate refund expectations according to IFRIC 14.

Summary net pension impacts on income statement

The net impact of defined benefit pension plans on Group financial statements can be summarized as follows:

(In €million)	12 months ended 31 December 2019	12 months ended 31 December 2018*
Operating margin	-9	-18
Other operating income and expenses	1	-2
Financial result	-30	-24
Total (expense)/profit	**-37**	**-44**

Other long-term employee benefits

The net liabilities related to other long-term employee benefits were € 64 million per December 31, 2018 (excluding Worldline). They decreased to € 50 million per December 31, 2019 via benefit payments and employer contributions (€ 34 million) net of expenses recorded in P&L (€ 25 million).

Note 12 Provisions

Provisions are determined by discounting the excepted future cash flows to estinguish the liability. Provisions are recognized when:

- the Group has a present legal, regulatory, contractual or constructive obligation as a result of past events and;
- it is probable that an outflow of resources embodying economic benefits will be required to settle the obligation and;
- the amount has been reliably quantified

(In €million)	December 31, 2018	Assets held for distribution	Charge	Release used	Release unused	Other (*)	December 31, 2019	Current	Non-current
Reorganization	70	-5	50	-36	-6	1	74	69	5
Rationalization	18	0	1	-6	-7	3	9	7	2
Project commitments	37	-3	14	-12	-5	-1	30	26	4
Litigations and contingencies	121	-31	17	-4	-12	-17	75	17	58
Total provisions	**247**	**-38**	**82**	**-58**	**-30**	**-14**	**188**	**119**	**69**

(*) Other movements mainly consist of the currency translation adjustments

(In €million)	December 31, 2017	Charge	Release used	Release unused	Business Combi-nation	Other (*)	December 31, 2018	Current	Non-current
Reorganization	77	41	-67	-5	24	0	70	68	2
Rationalization	25	4	-6	-3	1	-2	18	6	12
Project commitments	46	14	-19	-20	17	0	37	30	7
Litigations and contingencies	138	11	-17	-23	16	-4	121	41	80
Total provisions	**286**	**69**	**-108**	**-51**	**58**	**-7**	**247**	**146**	**101**

(*) Other movements mainly consist of the currency translation adjustments

Reorganization

New reorganization provisions were posted for € 50 million over the year mainly in Germany, France and Benelux and The Nordics driven by new plans aimed at improving Group efficiency and productivity.

The € 36 million consumptions primarily corresponded to workforce optimization in Germany, Central Eastern Europe and Benelux and The Nordics.

Rationalization

The new provisions of € 1 million mainly relate to office premises rationalization in Germany.

The € 6 million rationalization provisions were used against office premises rationalization costs in Germany, in United Kingdom, in Benelux and The Nordics and in the United States.

Project commitments

The € 14 million charge was mainly incurred in Central Eastern Europe, in Germany in Benelux and The Nordics and in India.

Project commitments provisions released for € 12 million primarily related to losses incurred in Central Eastern Europe, Germany, and France.

Litigation and contingencies

The closing position of contingency provisions of € 75 million was composed of a number of long-term litigation issues, such as tax contingencies and social disputes, guarantees given on disposals and other disputes with clients and suppliers.

The legal department monitors these situations closely with a view to minimizing the ultimate liability.

Note 13 Fair value and characteristics of financial instruments

Derivative financial instruments

Derivative instruments are recognized as financial assets or liabilities at their fair value. Any change in the fair value of these derivatives is recorded in the income statement as a financial income or expense, except when they are eligible for hedge accounting, whereupon:

- for fair value hedging of existing assets or liabilities, the hedged portion of an instrument is measured on the statement of financial position at its fair value. Any change in fair value is recorded as a corresponding entry in the income statement, where it is offset simultaneously against changes in the fair value of the designated hedging elements except for any ineffectiveness;
- for cash flow hedging, the effective portion of the change in fair value of the hedging instrument is directly recognized in shareholders' equity as "items recognized directly in equity". The change in value of the ineffective portion is recognized in "Other financial income and expenses". Amounts deferred in equity are taken to the income statement at the same time as the related hedged cash flow.

The Group uses forward foreign exchange contracts to hedge the variability in cash flows arising from changes in foreign exchanges rates relating to foreign currency sales and purchases. The Group designates only the spot element of the forward exchange contract as the hedging instrument in cash flow hedging relationships for highly probable transactions. Under IFRS 9, the Group has elected to separately account for the forward points as a cost of hedging. Consequently, the changes in forward points will be recognized in other comprehensive income and accumulated in a cost of hedging reserve as a separate component within equity and accounted for subsequently as gain and losses accumulated in the cash flow hedge reserve as part of the underlying covered transaction.

(In € million)	December 31, 2019		December 31, 2018	
	Assets	Liabilities	Assets	Liabilities
Forward foreign exchange contracts	7	-1	12	-2
Forward interest rate contracts	-	-2	-	-3
Analysed as :				
. Non-current	-	-2	-	-3
. Current	7	-1	12	-2

The fair value of financial instruments is provided by independent counterparties.

Interest rate risk

In 2018, bank loans and commercial papers of € 880 million, and in 2019 bank loans and Commercial Papers of € 755 million are arranged at floating rates, thus exposing the Group to cash flow interest rate risk.

The Group may mitigate its interest rate exposure using interest rates swap contracts with financial institutions in order to fix the rate of a portion of the floating-rate financial debt. The fair value of the financial instruments used to hedge the floating-rate financial qualifies for cash flow hedge accounting.

Exposure to interest rate risk

The table below presents the interest rate risk exposure of the Group based on future debt commitments. The exposure at floating rate after hedging risk management is approximately € 2,059 million as at December 31, 2019. A 1.0% decrease in 1-month Euribor would reduce income from interest by € 20.6 million in theory assuming the structure (cash/floating debt/hedges) remains stable for the full period of the year.

(In € million)	Notes	Exposure Less than 1 year	 More than 1 year	Total
Bank loans & NEU CP		-755	-	-755
Securitization	Note 6.4.1	-10	-	-10
Other		-54	-1	-55
Total liabilities		**-819**	**-1**	**-820**
Cash and cash equivalents	Note 6.2	2,413	-	2,413
Overdrafts		-79	-	-79
Total net cash and cash equivalents (*)		**2,334**	**-**	**2,334**
Net position before risk management		1,515	-1	1,514
Hedging instruments		45	500	545
Net position after risk management		**1,560**	**499**	**2,059**
Bonds	Note 6.4.1	-600	-2,100	-2,700
Optional exchangeable bond	Note 6.4.1	-	-500	-500
NEU MTN at fixed rate		-	-50	-50
Total net debt/cash after risk management		**-600**	**-2,650**	**-1,191**

(*) Overnight deposits (deposit certificate) and money market securities and overdrafts

Liquidity risk

On November 14, 2019 Atos has fully repaid the term loans in USD and EUR drew on October 9, 2018 to fund the Syntel acquisition. The outstanding amounts were $ 1,045 million and € 513 million.

On October 30, 2019 Atos has announced the disposal of Worldline share capital (€ 780 million through a private placement by way of Accelerated Book building Offering (ABO) and the issuance of € 500 million zero coupon bonds exchangeable into Worldline shares with a maturity of 5 years and an exchange premium of 35%. Total gross proceeds for Atos was € 1,280 million for the combined transactions.

On November 5, 2018, Atos announced the successful placement of its € 1.8 billion bond issue. The € 1.8 billion triple tranche bond issue consists of three tranches:

- € 700 million notes with a 3.5-year maturity and 0.75 % coupon
- € 750 million notes with a 6.5-year maturity and 1.75 % coupon
- € 350 million notes with a 10-year maturity and 2.50 % coupon

There are no financial covenants. The rating agency Standard and Poor’s has assigned a rating of BBB+ to the three tranches, subsequently to the rating of Atos described here below.

On October 22, 2018, the rating agency Standard and Poor’s has assigned a rating of BBB+ to Atos recognizing the strong investment grade profile of the Group.

On October 11, 2018, Atos signed with a number of major financial institutions a five-year € 2.4 billion revolving credit facility (the Facility) maturing in November 2023 with an option for Atos to request the extension until November 2025 in two times. Atos has exercised the option on 2019 to extend the maturity of the Facility until November 2024. Atos still keeps the option to extend the maturity of the Facility for another one year. The Facility is available for general corporate purposes and replaces the existing € 1.8 billion facility signed in November 2014. The Facility includes one financial covenant which is the leverage ratio (net debt divided by Operating Margin before Depreciation and Amortization) which may not be greater than 2.5 times.

On October 9, 2018, Atos drew a bridge loan of $ 1.9 billion for the acquisition of Syntel. The bridge loan was fully reimbursed on November 9, 2018.

On October 9, 2018, Atos drew a term loan of $ 1.9 billion for the acquisition of Syntel. The term loan was composed of a 3-year $ 1.1 billion loan and a 5-year $ 0.8 billion loan. The term loan issuance by currency was $ 0.6 billion equivalent euros and $ 1.3 billion in USD. On December 14, 2018, Atos reimbursed $ 200 million out of the loan drawn in USD.

The $ 1.9 billion term loan includes one financial covenant which is the leverage ratio (net debt divided by Operating Margin before Depreciation and Amortization) which may not be greater than 2.5 times.

On May 4, 2018 Atos implemented a Negotiable European Medium-Term Note program (NEU MTN) in order to optimize financial expenses and improve Group liquidity management, for an initial maximum amount of € 600 million.

On June 2, 2017, Atos implemented a Negotiable European Commercial Paper program (NEU CP) in order to optimize financial expenses and improve Group liquidity management, for an initial maximum amount of € 900 million raised to € 1.8 billion in October 2018. On December 10th, 2019 the maximum amount of € 1.8 billion was increased to € 2.4 billion.

On September 29, 2016, Atos issued a Euro private placement bond of € 300 million with a seven-year maturity and with a 1.444% fixed interest rate (unrated). There are no financial covenants.

On July 2, 2015 Atos issued a bond of € 600 million with a five-year maturity. The coupon rate is 2.375% (unrated). There are no financial covenants.

Atos securitization program of trade receivables has been renewed for 5 years on May 29, 2018 with a maximum amount of receivables sold of € 500 million and a maximum amount of financing reduced from € 200 million to € 100 million. The program has been restricted to two French participant entities.

The program is still structured with two compartments, called ON and OFF:

- compartment "ON" is similar to the previous program (i.e. the receivables are maintained in the Group statement of financial position) which remains by default the compartment in which the receivables are sold. This compartment was used at its lowest level;
- compartment "OFF" is designed so the credit risk (insolvency and overdue) of the debtors eligible to this compartment of the program is fully transferred to the purchasing entity of a third-party financial institution.

As of December 31, 2019, the Group has sold:

- in the compartment "ON" € 108 million receivables for which € 10 million were received in cash. The sale is with recourse, thus re-consolidated in the statement of financial position;
- in the compartment "OFF" € 37 million receivables which qualify for de-recognition as substantially all risks and rewards associated with the receivables were transferred.

The Atos securitization program includes one financial covenant which is the leverage ratio (net debt divided by Operating Margin before Depreciation and Amortization) which may not be greater than 2.5.

The calculation of the below-mentioned ratios as of December 31, 2019 is provided below in respect of the credit documentation of the multi-currency revolving credit facility and the securitization program, that excluded IFRS 16 impacts.

Nature of ratios subject to covenants	Covenants	12 months ended December 31, 2019	12 months ended December 31, 2018
Leverage ratio (net debt/OMDA)*	not greater than 2.5	1.19	1.54

(*) OMDA : Operating margin before non cash items

Currency exchange risk

Atos operates in 73 countries. However, in most cases, Atos invoices in the country where the Group renders the service, thus limiting the foreign exchange risk. Where this is not the case, the Group generally uses hedging instruments such as forward contracts or foreign currency swaps to minimize the risk.

The carrying amount of the Group's foreign currency denominated monetary assets and monetary liabilities at the reporting date are as follows:

(In € million)	2019	2018	2019	2018	2019	2018
	EUR		GBP		USD	
Assets	189	107	38	17	214	180
Liabilities	44	34	3	3	145	30
Foreign exchange exposure before hedging	145	73	35	14	70	150
Hedged amounts	-328	-347	-80	-85	-119	-78
Foreign exchange impact after hedging	**-183**	**-274**	**-45**	**-72**	**-49**	**72**

Foreign currency sensitivity analysis

The entities with functional currencies in EUR, GBP and USD are mainly exposed to Foreign Exchange risk.

The following table details the Group sensitivity to a 5% increase and decrease of the sensitive currency against the relevant functional currency of each subsidiary. The sensitivity analysis includes only outstanding foreign currency denominated monetary items and adjusts their translation at the period end for a 5% increase in foreign currency rates.

(In €million)	2019	2018	2019	2018	2019	2018
	EUR		GBP		USD	
Income Statement	-9	-14	-2	-4	-2	4

Hedge accounting

There is no material deviation between the maturity of the financial instruments and the period in which the cash flows are expected to occur.

As at December 2019, derivatives were all allocated to the hedging of transactional risks (foreign exchange currency risks). From an accounting point of view, most of the derivatives were considered as cash flow hedge instruments.

The breakdown of the designation of the instruments by currency is as follows:

(In € million)	December 31, 2019		December 31, 2018	
Instruments	Fair value	Notional	Fair value	Notional
Cash flow hedge				
Interest rate				
SWAP	-2	545	-3	545
Foreign exchange				
Forward contracts USD	0	31	0	88
Forward contracts GBP	-	-	0	4
Forward contracts INR	2	161	7	142
Forward contracts MXN	1	26	-1	25
Forward contracts PLN	1	108	0	118
Forward contracts PHP	0	27	1	24
Forward contracts RON	0	43	1	44
Forward contracts RUB	0	9	0	6
Forward contracts MAD	0	13	1	20
Forward contracts CNY	0	2	0	2
Forward contracts CHF	0	10	0	-8
Forward contracts TRY	-	-	0	-
Trading and fair value hedge				
Foreign exchange				
Forward contracts USD	0	61	0	19
Forward contracts GBP	0	-14	-	-13
Forward contracts INR	0	12	0	8
Forward contracts MAD	0	7	0	3
Forward contracts CNY	0	1	-	-
Forward contracts RON	0	5	0	7
Forward contracts PLN	0	18	0	24
Forward contracts PHP	0	3	0	4
Forward contracts MXN	0	3	-	-

The net amount of cash flow hedge reserve at December 31, 2019 was €+4 million (net of tax), with a variation of €-2 million (net of tax) over the year.

Note 14 Shareholders' equity

14.1. Earnings per share

Basic earnings per share is calculated by dividing the net income (attributable to owners of the parent) by the weighted average number of ordinary shares outstanding during the period. Treasury shares deducted from consolidated equity are not considered in the calculation of basic or diluted earnings per share.

Diluted earnings per share is calculated by dividing the net income attributable to owners of the parent, adjusted for the financial cost net of tax of dilutive debt instruments, by the weighted average number of ordinary shares outstanding during the period, plus the average number of shares which, according to the share buyback method, would have been outstanding had all the issued dilutive instruments been converted (stock options and convertible debt).

The dilutive impact of each convertible instrument is determined in order to maximize the dilution of basic earnings per share. The dilutive impact of stock options is assessed based on the average price of Atos shares over the period.

Potential dilutive instruments comprised stock options (4.659 employee stock options) and did not generate a restatement of net income used for the diluted EPS calculation.

(In €million and shares)	**12 months ended December 31, 2019**	**12 months ended December 31, 2018***
Net income from continuing operations– Attributable to owners of the parent [a]	**414**	**560**
Impact of dilutive instruments	-	-
Net income from continuing operations restated of dilutive instruments - Attributable to owners of the parent [b]	**414**	**560**
Average number of shares outstanding [c]	107,669,930	106,012,480
Impact of dilutive instruments [d]	4,659	15,254
Diluted average number of shares [e]=[c]+[d]	107,674,589	106,027,734
(In €)		
Basic EPS from continuing operations [a] / [c]	**3.84**	**5.28**
Diluted EPS from continuing operations [b] / [e]	**3.84**	**5.28**

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

(In €million and shares)	**12 months ended December 31, 2019**	**12 months ended December 31, 2018***
Net income from discontinued operation - Attributable to owners of the parent [a]	**2,986**	**70**
Impact of dilutive instruments	-	-
Net income from discontinued operation restated of dilutive instruments - Attributable to owners of the parent [b]	**2,986**	**70**
Average number of shares outstanding [c]	107,669,930	106,012,480
Impact of dilutive instruments [d]	4,659	15,254
Diluted average number of shares [e]=[c]+[d]	107,674,589	106,027,734
(In €)		
Basic EPS from discontinued operation [a] / [c]	**27.74**	**0.67**
Diluted EPS from discontinued operation [b] / [e]	**27.73**	**0.67**

** Income and expense items relating to Worldline for 2018 have been reclassified to "Net income from discontinued operation", in accordance with IFRS 5.*

No significant share transactions occurred subsequently to the 2019 closing that could have a dilutive impact on earnings per share calculation.

14.2. Equity attributable to the owners of the parent

Treasury shares

Atos shares held by the parent company are recorded at their acquired cost as a deduction from consolidated shareholders' equity. In the event of a disposal, the gain or loss and the related tax impacts are recorded as a change in consolidated shareholders' equity.

Capital increase

In 2019, Atos SE increased its share capital by incorporating additional paid-in-capital and common stock for € 142 million related to the issuance of 2,328,695 new common stocks split as follows:

- 2,039,710 new shares,
- Exercise of 25,467 stock options in 2019,
- Employee share option plan for 263,518.

As at December 31, 2019, Atos SE issued share capital amounted to € 109 million, divided into 109,214,914 fully paid-up common stock of € 1.00 par value each.

Distribution in kind - Worldline

Following the decision made on January 29, 2019 by Atos Board of Directors to submit to Annual General Meeting the project to distribute 23.5% of Worldline total shares to Atos shareholders and the approval of the transaction by Atos shareholders at the Annual General Meeting on April 30, 2019, this distribution of Worldline shares took effect on May 7, 2019, the payment date for the stock dividend, for a total amount of € 2,344 million, corresponding to a distribution of 42,852,724 Worldline shares valued at € 54.7 per share.

14.3. Non-controlling Interests

Non-controlling interests purchase commitments

The Group can take commitments to repurchase the non-controlling interests of shareholders of certain subsidiaries. The strike price of these put options may be set or determined according to a predefined calculation formula, and the options may be exercised at any time or on a specific date.

The Group records a financial liability at the present value of the strike price in respect of the put options granted to holders of non-controlling interests in the entities concerned. The offsetting entry for this financial liability differs depending on whether the non-controlling shareholders have maintained present access to the economic benefits of the entity. In the case of present access to the entity's economic benefits, non-controlling interests are maintained in the statement of financial position and the liability is recognized against equity attributable to owners of the parent. Where access to the entity's economic benefits is no longer available by virtue of the put option, the corresponding non-controlling interests are derecognized.

The difference between the liability representing the commitment to repurchase the non-controlling interests and the carrying amount of derecognized non-controlling interests is recorded as a deduction from equity attributable to owners of the parent. Subsequent changes in the value of the commitment are recorded by an adjustment to equity attributable to owners of the parent.

(In €million)	December 31, 2018	2019 Income	Assets Held for distribution	Dividends	Scope Changes	Capital Increase	December 31, 2019
Worldline	2,019	89	-2,107	-	-	-	-
Other	9	3	-	-3	-	3	12
Total	**2,027**	**92**	**-2,107**	**-3**	**-**	**3**	**12**

(In €million)	December 31, 2017	2018 Income	Capital Increase	Dividends	Scope Changes	Others	December 31, 2018
Worldline	555	69	1,140	-7	282	-20	2,019
Other	10	4	-	-4	-1	-	9
Total	**564**	**73**	**1,140**	**-11**	**281**	**-20**	**2,027**

In 2019, the significant decrease of the non-controlling interest was due to the loss of control of Worldline, following the distribution in kind of Worldline shares on May 2019, from now accounted for under equity method.

Non-controlling interests are not significant for the Group anymore.

Note 15 Off-balance sheet commitments

Contractual commitments

The table below illustrates the minimum future payments for firm obligations and commitments over the coming years. Amounts indicated under the long-term borrowings are posted on the Group consolidated statement of financial position.

(In €million)	December 31, 2019	Maturing Up to 1 year	Maturing 1 to 5 years	Maturing Over 5 years	December 31, 2018
Bonds	2,700	600	1,750	350	2,700
Optional exchangeable bond	500	-	500	-	-
Bank loans & commercial papers	805	755	-	50	2,365
Finance leases	-	-	-	-	15
Recorded on the balance sheet	**4,005**	**1,355**	**2,250**	**400**	**5,080**
Operating leases: land, buildings, fittings *	-	-	-	-	1,220
Operating leases: IT equipment *	-	-	-	-	264
Operating leases: other fixed assets *	-	-	-	-	75
Leases as low value and short term lease	19	7	12	-	-
Non-cancellable purchase obligations (> 5 years)	101	-	101	-	366
Commitments	**120**	**7**	**113**	**-**	**1,924**
Total	**4,125**	**1,362**	**2,363**	**400**	**7,004**
Financial commitments received (Syndicated Loan)	2,320	-	2,320	-	2,320
Total received	**2,320**	**-**	**2,320**	**-**	**2,320**

** Commitments are recognized as lease liability starting January 1, 2019*

The received financial commitment refers exclusively to the non-utilized part of the € 2.4 billion revolving facility.

Commercial commitments

(In €million)	December 31, 2019	December 31, 2018
Bank guarantees	**347**	**398**
- Operational - Performance	253	207
- Operational - Bid	14	14
- Operational - Advance Payment	68	97
- Financial or Other	12	79
Parental guarantees	**3,343**	**4,751**
- Operational - Performance	3,168	3,828
- Financial or Other	175	923
Pledges	**7**	**9**
Total	**3,697**	**5,157**

For various large long-term contracts, the Group provides performance guarantees to its clients. These guarantees amount to € 3,168 million as of December 31, 2019, compared with € 3,828 million at the end of December 2018. This decrease of € 660 million compared to last year is mainly due to the expiration of some guarantees provided to the benefit of the US, UK and Benelux & the Nordics customers.

In relation to the multi-currency revolving facility amended in October 2018, Atos SE issued a parental guarantee to the benefit of the consortium of banks represented by BNP Paribas, in order to cover up to € 660 million (unchanged amount) the obligations of its subsidiaries: Atos Telco Services B.V. and Atos International B.V..

Atos SE has given a € 102 million guarantee to Ester Finance in relation to a securitization program involving certain of its subsidiaries. Guarantee amount decreased due to the restructuration of the securitization program in May 2018.

As part of the general agreement with Siemens in respect of the transfer of SIS UK pension liabilities, the Board of Atos SE, during its March 29, 2011 meeting, agreed to provide a 20-year guarantee to the Atos 2011 Pension Trust set up to accommodate the transfer. The maximum amount of the guarantee is £ 200 million (€ 233 million).

In the framework of the Atos pension Schemes rationalization in the UK, for a more efficient structure, the Board of Directors of Atos SE, during its July 22, 2018 meeting, agreed to provide one parental guarantee (replacing-three existing) to the Atos Pension Schemes Limited as trustee of the new Atos UK 2019 Pension Scheme set up on November 1, 2019. Under the said guarantee, Atos SE will guarantee the obligations of the sponsoring employers. The total estimated amount of the new guarantee is £ 587 million (€ 685 million).

Note 16 Related party transactions

Related parties are defined as follows:

- entities which are controlled directly by the Group, either solely or jointly, or indirectly through one or more intermediary controls. Entities which offer post-employment benefits in favor of employees of the Group, or entities which are controlled or jointly owned by a member of the key management personnel of the Group as defined hereafter; and
- key management personnel of the Group defined as persons who have the authority and responsibility for planning, directing and controlling the activity of the Group, namely members of the Board of Directors as well as Senior Executive Vice-Presidents.

Transactions between Atos and its subsidiaries, which are related parties of the Group, have been eliminated in consolidation and are not disclosed in this note.

Transactions between the related parties

The main transactions between the related entities are composed of:

- The reinvoicing of the premises;
- The invoicing of delivery services such as personnel costs or use of delivery infrastructure;
- The invoicing of administrative services; and
- The interest expenses related to the financial items.

These transactions are entered into at market conditions.

Related party transactions are detailed as follows:

(in € million)	8 months ended December 31, 2019
Continuing operations	
Revenue	58
Operating income/expenses	-59
Discontinued operation	
Costs to distribute	-16

The receivables and liabilities included in the statement of financial position linked to the related parties are detailed as follows:

(in € million)	December 31, 2019
Trade accounts and notes receivables	23
Trade accounts and notes payables	26

Compensation of members of the Board of Directors as well as Senior Executive Vice-President

The remuneration of the key members of Management during the year is set out below:

(In €million)	12 months ended 31 December 2019	12 months ended 31 December 2018
Short-term benefits	6	6
Employer contributions & other taxes	3	2
Post-employment benefits	1	3
Equity-based compensation: stock options & free share plans	7	5
Total	**18**	**16**

Short-term benefits include salaries, bonuses and fringe benefits. Bonuses correspond to the total charge reflected in the income statement including the bonuses actually paid during the year, the accruals relating to current year and the release of accruals relating to prior year.

The Chairman and Chief Executive Officer ("CEO") resigned from his offices on October 31, 2019 and claim his mandatory retirement benefits. He benefited from the supplementary pension plan reserved for members of the Group's Executive Committee ending their career at Atos SE or Atos International SAS governed by article L. 137-11 of the French Social Security Code. The gross amount of this pension amounts to € 627,586. Pensions are paid by an insurer and Atos funds its commitments when beneficiaries retire. The Chairman and CEO has informed that he waived this pension supplement that he could be entitled during his mandate period at the European Commission, which runs until end of 2024.

The Chairman and CEO did not have an employment contract and is not entitled to severance payment at the end of his mandate. Besides, the Chairman and CEO has stated to the Board of Directors that he wishes to waive any due or potential variable compensation for the year 2019 as well as all his equity instruments rights (performance shares and stock-options) that were not vested yet.

Note 17 Main operating entities part of scope of consolidation as of December 31, 2019

	% of Interest	Consolidation method	% of Control	Adress
HOLDING				
Atos SE	Consolidation Parent Company			80, quai Voltaire - 95870 Bezons
Atos International B.V.	100	FC	100	Burgemeester Rijnderslaan 30, 1185 MC Amstelveen, The Netherlands
Saint Louis Ré	100	FC	100	74, rue de Merl - L2146 Luxembourg
Atos International SAS	100	FC	100	80, quai Voltaire - 95870 Bezons
Bull SA	100	FC	100	Rue Jean Jaurès - 78340 Les Clayes-sous-Bois
FRANCE				
Worldline SA	16.9	EM	25.6	80, quai Voltaire - 95870 Bezons
Atos Integration SAS	100	FC	100	80, quai Voltaire - 95870 Bezons
Atos Infogérance SAS	100	FC	100	80, quai Voltaire - 95870 Bezons
Atos Consulting SAS	100	FC	100	80, quai Voltaire - 95870 Bezons
Atos Worldgrid SAS	100	FC	100	80, quai Voltaire - 95870 Bezons
Yunano	100	FC	100	80, quai Voltaire - 95870 Bezons
Bull SAS	100	FC	100	Rue Jean Jaurès - 78340 Les Clayes-sous-Bois
Keynectis SA	100	FC	100	175, rue Jean Jacques Rousseau - 92130 Issy les Moulineaux
Agarik SAS	100	FC	100	20, Rue Dieumegard 93400 Saint-Ouen
Avantix SAS	100	FC	100	655, avenue Galilée - 13794 Aix en Provence
Evidian SA	100	FC	100	Rue Jean Jaurès - 78340 Les Clayes-sous-Bois
Air Lynx	100	FC	100	1, avenue de l'Atlantique, Immeuble Everest – 91940 Les Ulis
GERMANY				
X PERION Consulting AG	100	FC	100	Nikolaus-Otto-Strasse 1, 22946 Trittau - Germany
Atos Information Technology GmbH	100	FC	100	Otto-Hahn-Ring, 6 - 81739 Munich - Germany
CHG Communications Holding GmbH	100	FC	100	Otto-Hahn-Ring, 6 - 81739 Munich - Germany
Unify Funding GmbH	100	FC	100	Otto-Hahn-Ring, 6 - 81739 Munich - Germany
Atos IT Dienstleistung und Beratung Gmbh	100	FC	100	Bruchstrasse, 5 - 45883 Gelsenkirchen - Germany
Atos International Germany Gmbh	100	FC	100	Otto-Hahn-Ring, 6 - 81739 Munich - Germany
Applied International Informatics GmbH	100	FC	100	Torstraße, 49 - 10119 Berlin - Germany
Bull GmbH	100	FC	100	Von-der-wettern-straße, 27 - 51149 Cologne - Germany
Science + computing AG	100	FC	100	Hagellocher Weg, 73 - 72070 Tübingen - Germany
Energy4u GmbH	100	FC	100	Albert-Nestler Straße, 17 - 76131 Karlsruhe - Germany
Wivertis Gmbh	50,1	FC	50,1	Konrad-Adenauer-Ring, 60D - 65187 Wiesbaden - Germany
Atos Support GmbH	100	FC	100	The Squaire, Am Flughafen 14 - 60549 Frankfurt am Main - Germany
Atos IT Services GmbH	100	FC	100	Stinnes-Platz, 1 - 45 472 Mülheim an der Ruhr Germany
Unify Communications and Collaboration GmbH & Co. KG (*)	100	FC	100	Otto-Hahn-Ring, 6 - 81739 Munich - Germany
Atos Systems Business Services GmbH	100	FC	100	Am seestem, 1 - 40547 Dusseldorf - Germany
Cycos AG	95.1	FC	100	Joseph-von-Frauenhofer-Straße, 5 - 52477 Alsdorf Germany
FastvViewer GmbH	100	FC	100	Schwesterhausgasse, 11 - 92318 Neumarkt - Germany
Unify Software and Solutions GmbH & Co. KG (*)	100	FC	100	Otto-Hahn-Ring, 6 - 81739 Munich - Germany
Unify GmbH & Co. KG (*)	100	FC	100	Otto-Hahn-Ring, 6 - 81739 Munich - Germany
Unify Beteiligungsverwaltung GmbH & Co. KG (*)	100	FC	100	Otto-Hahn-Ring, 6 - 81739 Munich - Germany
Unify Deutschland Holding GmbH	100	FC	100	Otto-Hahn-Ring, 6 - 81739 Munich - Germany
Unify Patente GmbH & Co. KG (*)	100	FC	100	Otto-Hahn-Ring, 6 - 81739 Munich - Germany

	% of Interest	Consolidation method	% of Control	Adress
THE NETHERLANDS				
Atos Nederland B.V.	100	FC	100	Burgemeester Rijnderslaan 30 - 1185 MC Amstelveen - The Netherlands
Atos Telco Services B.V.	100	FC	100	Burgemeester Rijnderslaan 30 - 1185 MC Amstelveen - The Netherlands
OTHER EUROPE - MIDDLE EAST - AFRICA				
Algeria				
Bull Algerie	100	FC	100	16, rue Yehia El-Mazouni, El Biar - Algiers - Algeria
Austria				
Atos IT GmbH	100	FC	100	Siemensstraße 92 - 1210 Vienna - Austria
Atos IT Solutions and Services GmbH	100	FC	100	Siemensstraße 92 - 1210 Vienna - Austria
TSG EDV-Terminal Service GmbH	99	FC	100	Modecenterstraße 1 - 1030 Vienna - Austria
Belgium				
Atos Belgium SA/NV	100	FC	100	Da Vincilaan, 5 - 1930 Zaventem - Belgium
Unify Communications N.V.	100	FC	100	Demeurslaan, 132 - 1654 Beersel - Belgium
Bielorussia				
LLC ATOS IT Solutions and Services	100	FC	100	Ul Leonid BEDI, 11 - BuildING 1 - 220040 Minsk - Biélorussia
Bulgaria				
Atos IT Solutions and Services EOOD	100	FC	100	Mladost 4 Region - Business Park Sofia Str, 4 - 1766 Sofia - Bulgaria
Ivory Coast				
Bull Cote d'Ivoire	100	FC	100	31 avenue Noguès - 01 BP 1580 Abidjan 01 - Ivory Coast
Denmark				
Atos IT Solutions and Services A/S	100	FC	100	Dybendalsvaenget 3 - 2630 Taastrup - Denmark
Croatia				
Atos IT Solutions and Services d.o.o	100	FC	100	Heinzelova 69 - 10000 Zagreb - Croatia
Czech Republic				
Atos IT Solutions and Services s.r.o.	100	FC	100	14000 Praha 4 - Doudlebská 1699/5 - Czech Republic
Gabon				
Bull Gabon	100	FC	100	Immeuble Abiali - ZI d'Oloumi - BP 2260 Libreville - Gabon
Greece				
Atos Greece SA	100	FC	100	Irakleio Avenue 455, N. Iraklio 14122 Athens Greece
Finland				
Atos IT Solutions and Services oy	100	FC	100	Kalkkipellontie 6 - 026050 Espoo - Finland
Hungary				
Atos Magyarország Kft	100	FC	100	1138 Budapest, Vaci ut 121-127. Vaci greens D Building, 4th floor - Hungary
Ireland				
Atos IT Solutions and Services Limited	100	FC	100	Fitzwilliam Court - Leeson Close - 2 Dublin - Ireland
Italy				
Atos Italia S.p.A.	100	FC	100	Via Caldera no. 21 - 20158 - Milan - Italy
Lebanon				
Bull SAL	100	FC	100	69 Rue Jal el Dib - Secteur 1 – BP 60208 - Beyrouth Lebanon
Lithuania				
UAB "Bull Baltija"	100	FC	100	40 Gostauto Street - 01112 Vilnius - Lithuania
Luxembourg				
Atos Luxembourg PSF S.A.	100	FC	100	1, rue Edmond Reuter Contern - 5326 - Luxembourg
Madagascar				
Bull Madagascar SA	100	FC	100	12, rue Indira Gandhi - Tsaralalana BP 252 - Antananarivo Madagascar

	% of Interest	Consolidation method	% of Control	Adress
Morocco				
Atos IT Services SARL	100	FC	100	Espace les Palmiers - angle Avenues Mehdi Benbaraka et Annakhil- Hayryad Rabat - Morocco
Atos ITS Nearshore Center Maroc SARL	100	FC	100	Casablanca - shore 7 - 1100, Boulevard Al Qods Quartier Sidi Maarouf - Casablanca - Morocco
Bull Maroc	100	FC	100	Casanearshore - 1100, Boulevard Al Qods - Quartier Sidi Maarouf - Casablanca - Morocco
Namibia				
Bull Information Technology Namibia Pty. Ltd.	100	FC	100	C/o Deloitte & Touche - Namdeb Center, 10 Bulow street - PO Box 47 - Windhoek - Namibia
Poland				
Atos Polska SA	100	FC	100	Krolewska, 16 - 00-103 Warsaw - Poland
Atos Poland Global Services Sp Zoo	100	FC	100	ul. Krolewska 16, 00-103 Warszawa , Poland
Portugal				
Atos Soluções e Serviços para Tecnologias de Informação, Unipessoal, Ltda	100	FC	100	Avenida José Malhoa 16 - Piso sétimo B2 - Edificio Europa. Distrito : Lisboa, Concelho : Lisboa, freguesia : Campolide 1070 159 Lisbon - Portugal
Romania				
Atos IT Solutions and Services s.r.l.	100	FC	100	Calea Floreasca 169A - Sector 1 - 014459 Bucharest - Romania
Atos IT Solutions Romania SRL	100	FC	100	Calea Floreasca 169A - Sector 1 - 014459 Bucharest - Romania
Atos Convergence Creators GmbH S.R.L	100	FC	100	Municipiul Braşov, Strada MIHAIL KOGĂLNICEANU, Nr. 21, Bloc C6, Judet Braşov, Romania
Russia				
Atos IT Solutions and Services LLC	100	FC	100	1st Kozhevnicheski per. 6, bld. 1 115114 Moscow - Russia
Senegal				
Bull Senegal	100	FC	100	Cité Keur Gorgui, Immeuble Khadimou Rassoul - BP 3183 Dakar - Senegal
Serbia				
Atos IT Solutions and Services d.o.o.	100	FC	100	Danila Lekica Spanca 31 - 11070 Beograd - Serbia
South Africa				
Atos (PTY) Ltd	74	FC	100	Woodlands Office Park, Ground Floor Building 32, 2144 Woodlands South Africa
Spain				
Atos Consulting Canarias, SA	100	FC	100	Calle Subida al Mayorazgo 24b - 38110 Santa Cruz de Tenerife Spain
Atos Spain SA	100	FC	100	Albarracin 25 - 28037 Madrid - Spain
Atos IT Solutions and Services Iberia SL	100	FC	100	Ronda de Europa 5 - 28760 Madrid - Spain
Atos Worldgrid SL	100	FC	100	Calle Isabel Torres, 19 Edificio Cisga - 39011 Santander - Spain
MSL Technology SL	100	FC	100	C/ Marques de Ahumada 7 - 28028 Madrid - Spain
Slovakia				
Atos IT Solutions and Services s.r.o.	100	FC	100	Pribinova 19/7828 - 811 09 Bratislava - Slovakia
Sweden				
Atos IT Solutions and Services AB	100	FC	100	Johanneslundsvägen 12-14 - 194 87 Upplands Väsby - Sweden
Switzerland				
Atos AG	100	FC	100	Freilagerstrasse 28 - 8047 Zürich - Switzerland
Turkey				
Atos Bilisim Danismanlik ve Musteri Hizmetleri Sanayi ve Ticaret A/S	99.92	FC	100	Yakacık Caddesi No 111 – 18 - 34870, Kartal, Istanbul - Turkey
United Arab Emirates - Dubai				
Atos Origin FZ LLC	100	FC	100	Office G20 - Building DIC-9 Dubai Internet City - PO Box.500437 United Arab Emirats - Dubai
ATOS FZ LLC Dubai Branch	100	FC	100	The Galleries Building - No2 Level 2 - Downtown Jebel 500437 United Arab Emirats - Dubai

	% of Interest	Consolidation method	% of Control	Adress
Saudi Arabia				
Atos Saudi LLC	49	PC	49	P. O. Box # 8772 - Riyadh-11492 Saudi Arabia
Qatar				
ATOS QATAR Llc	100	FC	100	Sheikh Suhaim bin Hamad Street - No.89858 - Doha - Qatar
Egypt				
Atos IT SAE	100	FC	100	50 Rue Abbass El Akkad - Nasr city- La Caire - Egypt
THE UNITED KINGDOM				
Atos Consulting Limited	100	FC	100	Second Floor - Mid City Place - 71 High holborn - London, WC1V6EA - United Kingdom
Atos IT Services Limited	100	FC	100	Second Floor - Mid City Place - 71 High holborn - London, WC1V6EA - United Kingdom
Atos IT Services UK Limited	100	FC	100	Second Floor - Mid City Place - 71 High holborn - London, WC1V6EA - United Kingdom
Atos UK IT Holdings Limited	100	FC	100	Second Floor - Mid City Place - 71 High holborn - London, WC1V6EA - United Kingdom
Atos Esprit Limited	95	FC	100	Second Floor - Mid City Place - 71 High holborn - London, WC1V6EA - United Kingdom
Shere Limited	100	FC	100	Second Floor - Mid City Place - 71 High holborn - London, WC1V6EA - United Kingdom
Atos BPS Ltd	100	FC	100	Second Floor - Mid City Place - 71 High holborn - London, WC1V6EA - United Kingdom
Atos UK Holdings Ltd	100	FC	100	Second Floor - Mid City Place - 71 High holborn - London, WC1V6EA - United Kingdom
Atos International IT Holdings Ltd	100	FC	100	Second Floor - Mid City Place - 71 High holborn - London, WC1V6EA - United Kingdom
Atos Restaurant Technology Services UK Limited	100	FC	100	4 Triton Square - Regent's Place - London, NW1 3HG United Kingdom
Unify Enterprise Communications Limited	100	FC	100	Second Floor - Mid City Place - 71 High holborn - London, WC1V6EA - United Kingdom
ENGAGE ESM HOLDING LTD	100	FC	100	Second Floor - Mid City Place - 71 High holborn - London, WC1V6EA - United Kingdom
ENGAGE ESM LTD	100	FC	100	Second Floor - Mid City Place - 71 High holborn - London, WC1V6EA - United Kingdom
ASIA PACIFIC				
Australia				
Atos (Australia) Pty. Ltd	100	FC	100	885 Mountain Highway 3153 Bayswater - Victoria Australia
China				
Atos Information Technology (Nanjing) Co., Ltd	100	FC	100	Floor 12 - Building 1B Powerise accelerator - High Tech zone Software park - Nanjing - Jiangsu Province - China
Atos Information Technology (China) Co. Ltd	100	FC	100	Room 05.161 - Floor 5 - Building E - No.7 - Zhonghuan Nanlu Wangjing - Chaoyang District - Beijing - China
Atos Worldgrid Information Technology (Beijing) Co Ltd	100	FC	100	Room 05.162 - Floor 5 - Building E - No.7 - Zhonghuan Nanlu Wangjing - Chaoyang District - Beijing - China
RTS Information Consulting (Chengdu) Co. Ltd	100	FC	100	Room 108-109 - 1st floor, Building B2 - Tianfu Software Park - High Tech Zone - Chengdu - Sichuan Province - China
Hong Kong				
Atos Information Technology HK Ltd	100	FC	100	8/F Octa Tower - 8 Lam Chak Street - Kowloon Bay - Kowloon Hong Kong
Bull Information Systems (Hong Kong) Limited	100	FC	100	RM 1401 - Hutchison House - 10, Harcourt Road Hong Kong
India				
Atos India Private Limited	100	FC	100	Godrej & Boyce Complex - Plant 5 - Pirojshanagar - LBS Marg Vikhroli(W) - Mumbai - 400079 - India
Atos IT Services Private Limited	99.99	FC	100	Innovator Building - International Tech Park - Whitefield Road - 560066 Bangalore - Karnataka - India

	% of Interest	Consolidation method	% of Control	Adress
Anthelio Business Technologies Private Limited	99.99	FC	100	Level 1, Part A of Tower1,Phase 2, SY.NO 115 (Part) Waverock, APIIC IT\ITES SEZ, Nanakramguda Serilingampally Mandal Hyderabad Telangana 500008 - India
Syntel Pvt Ltd.	100	FC	100	Unit No,112, SDF IV, SEEPZ Andheri (East) Mumbai 400 096 Maharashtra- India
State street Syntel Services Pvt Ltd (**)	100	FC	100	4/5th floor, Building No.4,Mindspace –Navi Mumbai,Thane-Belapur road,Airoli-400708, India
Syntel Global Pvt Ltd	100	FC	100	Ground floor,E-Tech Software Technology Park,Dhokali Naka,Kolshet road,Thane(West)-400607, India
Japan				
Atos KK	100	FC	100	6 F, Daisan Toranomon Denki Building - 1-2-20 Minato-ku Tokyo - Japan
Evidian-Bull Japan KK	100	FC	100	6 F, Daisan Toranomon Denki Building - 1-2-20 Minato-ku Tokyo - Japan
Malaysia				
Atos Services (Malaysia) SDN BHD	100	FC	100	16-A (1st Floor) Jalan Tun Sambanthan - 3 Brickfields - 50470 Kuala Lumpur - Malaysia
Mauritius				
State street Syntel Services Mauritus Ltd (**)	100	FC	100	C/o SGG Corporate Services (Mauritius) Ltd 33, Edith Cavell Street - Port Louis, 11324 Mauritius
Philippines				
Atos Information Technology Inc.	99.94	FC	100	23/F Cyber One Building - Eastwood City - Cyberpark - 1110 Libis, Quezon City - Philippines
Atos Global Delivery Center Philippines, Inc.	100	FC	100	8th Floor, Two E-Com Center, Palm Coast Ave., Mall of Asia Complex, 1110 Pasay City - Philippines
Singapore				
Atos Information Technology (Singapore) Ptd Ltd	100	FC	100	Blk 988 Toa Payoh North #08-01 - 319002 Singapore
Taïwan				
Atos (Taiwan) Ltd	100	FC	100	5F, No 100 Sec 3, Min Sheng E. Road - Taipei -Taïwan
Thaïland				
Atos IT Solutions and Services Ltd	100	FC	100	2922/339 Charn Issara Tower II - 36th Floor - New Petchburi Road - Bangkapi - Huay Kwang - 10310 Bangkok - Thaïland
AMERICAS				
Argentina				
Atos Argentina SA	100	FC	100	Cnel. Manuel Arias 3751, piso 18, PB, C.A.B.A.- C1430DAL Buenos aires - Argentina
Bull Argentina SA	100	FC	100	Manuela Saenz 323 5to. Piso Of. 506 - C 1107 bpa Buenos aires - Argentina
Brazil				
Atos Brasil Ltda	100	FC	100	Rua Werner Von Siemens, 111 – Prédio 6 – Lapa - São Paulo -SP - CEP 05069-900 - Brazil
Atos Serviços de Tecnologia da Informação do Brasil Ltda	100	FC	100	Rua Werner Von Siemens, 111 – Prédio 6 – Lapa - São Paulo -SP - CEP 05069-900 - Brazil
Bull Ltda.	100	FC	100	Rua Wemer Von Siemens, 111 – Prédio 6 – Lapa - São Paulo -SP - CEP 05069-900 - Brazil
Canada				
Atos Inc.	100	FC	100	6375 Shawson Drive - L5T 1S7 Mississauga - Ontario - Canada
Amesys Canada Inc.	100	FC	100	206-137 rue Saint Pierre - H2Y3T5 Montreal, Quebec - Canada
Colombia				
Atos IT Solutions and Services S.A.S	100	FC	100	Autopista Norte Carrera 45 N° 108-27 Torre 2 oficina 1505 - Bogotá - Colombia
Mexico				
Atos Global Delivery Center México, S. de R.L. de C.V.	99.90	FC	100	Sevilla No. 40 Piso 3 - Colonia Juarez delgation Cuauhtemoc - 06600 Ciudad de Mexico - Mexico

	% of Interest	Consolidation method	% of Control	Adress
The United States of America				
Atos IT Outsourcing Services, LLC	100	FC	100	the 4851 Regent Boulevard – Irving, TX 75063 – United States of America
Atos Governmental IT Outsourcing Services, LLC	100	FC	100	the 4851 Regent Boulevard – Irving, TX 75063 – United States of America
Atos Healthcare Services, LLC	100	FC	100	the 4851 Regent Boulevard – Irving, TX 75063 – USA - United States of America
Atos Syntel Inc.	100	FC	100	525 E. Big Beaver Road,Suite 300, Troy, MI 48083 - United States of America
Anthelio Global Inc.	100	FC	100	One Lincoln Centre, Suite 200 - 5400 LBJ Freeway TX 75240 Dallas - United States of America
Atos Digital Health Solutions	100	FC	100	2500 Weschester Ave - 3rd Floor - Purchase New York 10577 - United States of America
Pyramid Healthcare Solutions Inc.	100	FC	100	One Lincoln Centre, Suite 200 - 5400 LBJ Freeway TX 75240 Dallas - United States of America
Evidian Systems Inc.	100	FC	100	285 Billerica Road, Suite 200 - Chelmsford, MA 01824-4174 United States of America
Unify Inc	100	FC	100	1630 Corporate Court - Irving - Texas 75038 - United States of America
Green Finco Inc.	100	FC	100	C/O The Corporation Trust Company, 1209 Orange Street, Wilmington, DE 19801 - United States of America
Engage ESM Inc.	100	FC	100	4851 Regent Boulevard - Floors 1, 3 & 4 Irving, TX 75063 - United States of America
Uruguay				
Bull Uruguay SA	100	FC	100	Av. Dr Luis A. de Herrera, 2802 - 1160 Montevideo - Uruguay

(*) The Group has an interest in five German companies, which are fully consolidated into these Group financial statements. The companies have made use of the stipulations available under § 264b of the German Commercial Code (HGB). It exempts these legal entities from the requirement to disclose separate audited financial statements as of 31 December 2019, since they are included in the Consolidated Financial Statements of the ultimate parent company (Atos S.E.) and such Consolidated Financial Statements for the full year of 2019 are registered with the trade register of the particular entity.

(**) Atos owns 49% of the shares of State Street Syntel Services (Mauritius). The joint arrangement between Atos Group and Atos Syntel Inc. has been qualified as joint operation under IFRS 11. Under IFRS 11.21, a joint operator shall account for the assets, liabilities, revenues and expenses relating to its interest in a joint operation in accordance with the IFRSs applicable to the assets, liabilities, revenues and expenses. The rights and obligations of the two Joint operators are defined in the Master Service Agreement signed between both parties and the shareholders agreement. JVs set up with State Street bank and Atos Group are committed to deliver IT services to State Street Inc. as per the Master Service Agreement. Syntel is entitled to 100% of the financial outcome of the contract and has to bear all liabilities. Therefore, Atos obligations are to ensure the settlement of JVs liabilities, ensure that state street receives the promised services. Atos Group is entitled in counterpart to receive revenues related to the services rendered to State Street to be accounted for in accordance with IFRS 15.

Note 18 Subsequent events

Atos has completed as of February 4, 2020 the sale of ca. 23.9 million Worldline shares, for ca. € 1.5 billion, through a placement to qualified investors by way of an accelerated bookbuilt offering (the "Placement").

The sale price of the Placement was set at € 61.5 per Worldline share. The Placement is a further milestone in the creation of two pure play global leaders in their respective industries. However, the relationship between the two groups will remain strong with the existing and unchanged industrial and commercial partnership created through the Atos-Worldline Alliance announced in January 2019. Atos plans to use the proceeds of the Placement to repay existing debt and for general corporate purposes. Following the Placement, Atos holds ca. 7 million Worldline shares, representing ca. 3.8% of the Worldline share capital, which are underlying the Bonds.

Note 19 Auditors' fees

(In €thousand and %)	Grant Thornton				Deloitte			
	Grant Thornton		***Other Grant Thornton***		***Deloitte & Associés***		***Other Deloitte members firms***	
	Fees	%	Fees	%	Fees	%	Fees	%
Audit and limited review of individual and consolidated financial statements								
Parent company	1,076	70%	-	-	1,328	63%	-	-
Subsidiaries	460	30%	3,369	78%	614	29%	2,093	76%
Sub-total Audit	**1,536**	**99%**	**3,369**	**78%**	**1,942**	**92%**	**2,093**	**76%**
Non audit services*								
Parent company	-	-	-	-	109	5%	-	-
Subsidiaries	8	1%	954	22%	70	3%	658	24%
Sub-total Non Audit	**8**	**1%**	**954**	**22%**	**179**	**8%**	**658**	**24%**
Total fees 2019	**1,544**	**100%**	**4,323**	**100%**	**2,121**	**100%**	**2,751**	**100%**

** In 2019, non audit services related to services provided at the Company's request and notably correspond to (i) certificates and reports issued as independent third party on the human resources, environmental and social information pursuant to article of the French Commercial Code, (ii) due diligence, and (iii) tax services, authorized by local legislation, in some foreign subsidiaries*

(In €thousand and %)	Grant Thornton				Deloitte			
	Grant Thornton		***Other Grant Thornton***		***Deloitte & Associés***		***Other Deloitte members firms***	
	Fees	%	Fees	%	Fees	%	Fees	%
Audit and limited review of individual and consolidated financial statements								
Parent company	1,120	53%	-	-	1,173	46%	-	-
Subsidiaries	824	39%	3,558	98%	812	32%	2,550	83%
Sub-total Audit	**1,944**	**92%**	**3,558**	**98%**	**1,985**	**77%**	**2,550**	**83%**
Non audit services*								
Parent company	15	1%	-	-	133	-	-	-
Subsidiaries	159	7%	56	2%	448	17%	521	17%
Sub-total Non Audit	**174**	**8%**	**56**	**2%**	**580**	**23%**	**521**	**17%**
Total fees 2018	**2,118**	**100%**	**3,614**	**100%**	**2,565**	**100%**	**3,071**	**100%**

** In 2018, non audit services related to services provided at the Company's request and notably correspond to (i) certificates and reports issued as independent third party on the human resources, environmental and social information pursuant to article of the French Commercial Code, (ii) due diligence, and (iii) tax services, authorized by local legislation, in some foreign subsidiaries*

C. Contacts and locations

C.1 Contacts

C.1.1 Global Headquarters

River Ouest
80 Quai Voltaire
95870 Bezons – France
+33 1 73 26 00 00

C.1.2 Corporate functions

Finance
Uwe Stelter +33 1 73 26 01 84

Human Resources, Siemens Partnership & CSR
Philippe Mareine +49 21 13 99 20 800

Executive & Talent Management, Communications
Marc Meyer +33 1 73 26 00 26

Sales & Marketing
Robert Vassoyan +33 1 73 26 00 00

Investor Relations & Financial Communication
Gilles Arditti +33 1 73 26 00 66

Mergers & Acquisitions, Legal, Compliance & Contract Management
Alexandre Menais +33 1 73 26 42 15

Procurement
Aurélia Tremblaye +33 1 73 26 08 41

Internal Audit
Hervé Striegel +33 6 98 44 24 67

C.1.3 Global organization

Infrastructure & Data Management
Eric Grall +48 525 259 326

Unified Communication & Collaboration
Robert Vassoyan +33 1 73 26 00 00

Business & Platform Solutions Public & Regional
Nourdine Bihmane +34 6 75 60 89 37

Business & Platform Solutions Atos Syntel
Adrian Gregory +44 780 591 04 28

Atos Syntel
Rakesh Khanna +91 98 1900 9000

Big Data & Cybersecurity
Pierre Barnabé +33 1 73 26 35 61

C.1.4 Investor Relations

Gilles Arditti
Executive Vice-President Investor Relations & Financial Communication
Tel: +33 1 73 26 00 66
gilles.arditti@atos.net

Yves Chabrol
Investor Relations Manager
Tel: +33 6 09 78 46 08
yves.chabrol@atos.net

Requests for information can also be sent by email to investors@atos.net

C.2 Locations

Atos is present in main cities to support customers. The addresses and phone numbers of the Group main offices can be found on the Locations page on website atos.net. Details of current job opportunities can be found in Careers pages. An email address for general questions and comments about the Atos' Internet site can be found at the bottom of the page.

Global Headquarters
River Ouest
80 Quai Voltaire
95870 Bezons – France
+33 1 73 26 00 00

Europe

Andorra
Austria
Belarus
Belgium
Bosnia
Bulgaria
Croatia
Czech Republic
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Italy
Ireland
Lithuania
Luxembourg
Poland
Portugal
Romania
Russia
Serbia
Slovakia
Slovenia
Spain
Sweden
Switzerland
The Netherlands
United Kingdom

Americas

Argentina
Brazil
Canada
Chile
Colombia
Guatemala
Mexico
Peru
Uruguay
USA

Asia Pacific

Australia
China
Hong Kong
Indonesia
Japan
Malaysia
New-Zealand
Philippines
Singapore
South Korea
Taiwan
Thailand

India, Middle-East & Africa

Algeria
Benin
Burkina Faso
Egypt
Gabon
India
Israel
Ivory-coast
Lebanon
Madagascar
Mali
Mauritius
Morocco
Qatar
Saudi Arabia
Senegal
South Africa
Tunisia
Turkey
United Arab Emirates

D. Full index