2019 ACTIVITY REPORT

PUBLIC GROUP AND INTERNATIONAL REINSURER

GROUPE
CAISSE CENTRALE DE RÉASSURANCE

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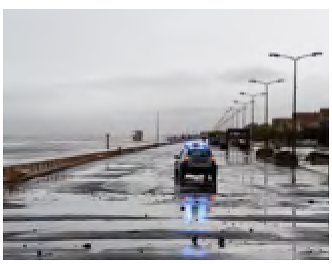

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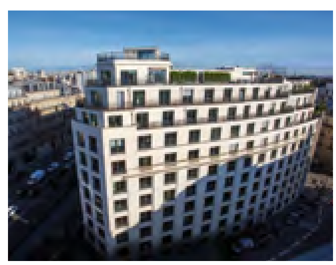

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— The Caisse Centrale de Réassurance Group, owned by the French State and with more than 70 years' experience in public and open market reinsurance, ranks among the 25 leading international reinsurance players.

A public reinsurer serving the general interest, CCR provides insurance companies operating in France, with State-guaranteed cover against natural disasters and uninsurable risks.

A multi-specialist international reinsurer, CCR Re is a subsidiary of CCR and offers Life, Non-Life and Specialty reinsurance in France and in 79 countries worldwide.

Today, the Caisse Centrale de Réassurance Group is a key actor in the field of reinsurance, recognised for its high level expertise in managing risks, its agility and the quality of its scientific research.

As at 31 December 2019, the Group employs 260 people in more than 30 roles. Our people are motivated by the desire to satisfy their clients and partners and they work to the highest professional standards. This commitment to their operational and research activities and to innovation is the cornerstone of the Group's performance and enables it to fulfil its missions and the expectations of its shareholder, its clients and its partners in the general interest.

CCR GROUP IN 2019

— 2019 was a year marked by another series of natural disasters both in France and abroad, which demonstrated reinsurers' social utility. The reinsurance sector also saw consolidation and transformation, in atypical conditions on the financial markets. The Group delivered good results in this challenging environment. CCR strengthened the sustainability of its economic model, while CCR Re continued to grow and improved its solvency at the same time. The Group continued to innovate and to transform itself at pace.

The car-park of the Decathlon shop in Cannes-Mandelieu, in the Maritime Alps Region, was entirely flooded, during the Southern France flooding, on Sunday 24th November 2019.


DECATHLON
MANDELIEU LA NAPOULE
À FOND
LA FORME !

On the 23th November 2019, the city of Nice suffers severe bad weather and deploys the *Vigilance rouge Pluie-inondation.*

FRANCE

Floods in the south-east in November 2019

From 22 November to 25 November and on 1 December 2019, the south-east of France experienced two severe *Cévenol* storms, which particularly affected the departments of the *Var*, *Alpes-Maritimes* and *Vaucluse*. The intense rainfall in the *Provence-Alpes-Côte d'Azur* region caused widespread flooding.

205 municipalities

were recognised as being in a state of natural disaster.

FRANCE
Floods in the south-west in December 2019
The south-west experienced severe weather from 12 to 15 December 2019. Torrential rain fell on *Nouvelle Aquitaine* region, accompanied by strong westerly winds, causing flooding in the *Gaves*, and in the *Adour* and *Garonne* basins.

51 municipalities
were recognised as being in a state of natural disaster.

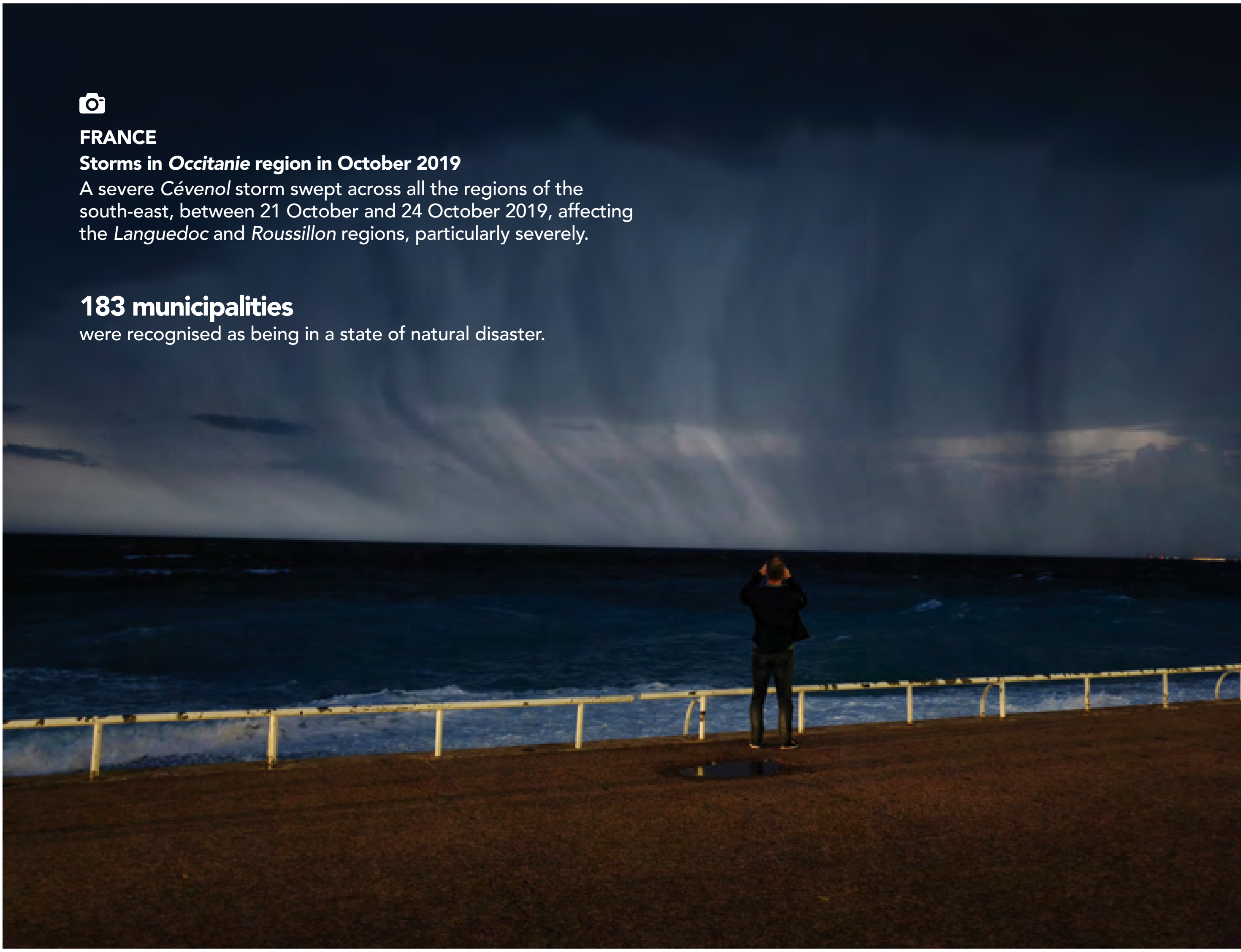
On 14th December 2019, the Garonne River rose out of its bed in downtown Toulouse, flooding the quays and the Filter Meadow.

FRANCE

Storms in *Occitanie* region in October 2019

A severe *Cévenol* storm swept across all the regions of the south-east, between 21 October and 24 October 2019, affecting the *Languedoc* and *Roussillon* regions, particularly severely.

183 municipalities
were recognised as being in a state of natural disaster.

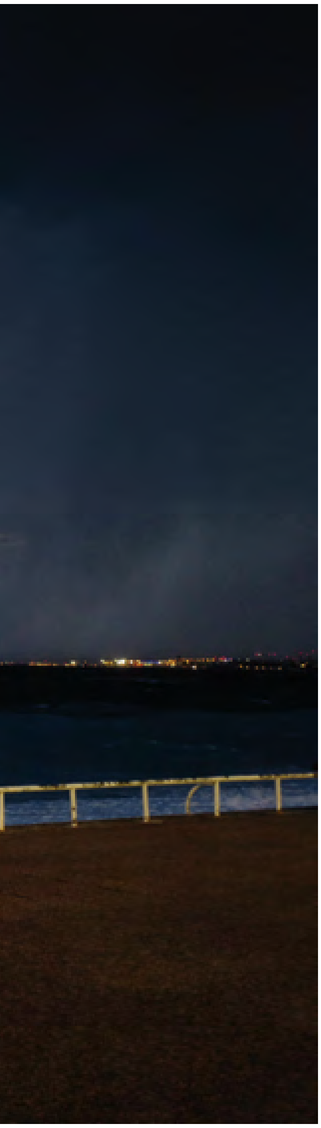


FRANCE

Earthquake in *Le Teil* municipality in November 2019

At 11:52 in the morning of 11 November 2019, an earthquake was felt in the *Rhône* middle valley, near the town of *Montélimar (Drôme* region). This earthquake had a local magnitude of 5.2 according to the French Central Seismology Office. The epicenter was recorded in the municipality of *Le Teil (Ardèche* region) at a shallow depth of 2 km. There was significant damage close to the epicenter as the earthquake was unusually shallow for one of this type in mainland France.

40 municipalities
were recognised as being in a state of natural disaster.



FRANCE
2019 drought

In 2019, France experienced a very significant rainfall deficit country wide. This led to another significant episode of geotechnical drought or “shrinkage-swelling” of clay soils, which caused cracks in many structures. The drought intensified over the months with a very dry summer until mid-September, with a particularly severe impact on a wide band, ranging from center France to the north-east.

24 departments
were affected by the drought.

INTERNATIONAL

Typhoons Faxai and Hagibis in Japan

Japan was severely affected by two large typhoons less than two weeks apart. On 12 October, Typhoon Hagibis made landfall on Izu Peninsula bringing intense rainfall and widespread flooding to the Tokyo region. This typhoon caused more than 70 deaths, making it the most lethal in Japan since Typhoon Talas in 2011 (Opposite).
On 9 September, the Faxai Typhoon eye (Top right-hand corner) crossed Tokyo Bay, generating violent winds and heavy rain in the most populous urban area in the world.

9 billion US dollars
(8.1 billion Euros) of insured losses for typhoon Hagibis.

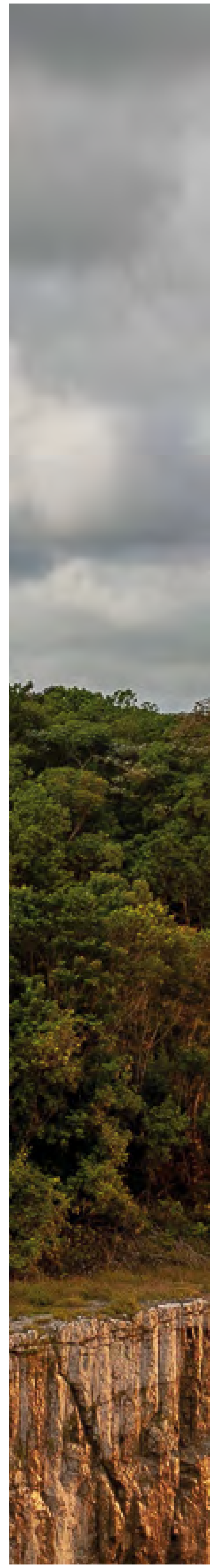
6 billion US dollars
(5.4 billion Euros) of insured losses for typhoon Faxai.

INTERNATIONAL

Bush fires in Australia

In late spring, fires raged across Australia as a result of record temperatures and drought. This unprecedented disaster affected more than 6 million hectares, claimed several dozens of lives and killed several hundred million animals.

995 million Australian dollars
(685 million US dollars) of combined losses, due to the bush fires since September 2019
(source: The Insurance Council of Australia, 10/01/2020).



INTERNATIONAL
Hurricane Dorian in the Caribbean

Hurricane Dorian was the most violent recorded in the Caribbean for 40 years. The storm struck the French West Indies late August before becoming a hurricane and, at the beginning of September, devastating the Bahamas archipelago and the Abaco islands and Grand Bahama in particular.

3,5 billion US dollars
of insured economic losses.

INTERNATIONAL

Falcon Eye 1 satellite launch failure

After 14 successful launches, Vega, Arianespace's light launcher, failed for the first time to place its cargo in orbit.

370 million US dollars

is the cost to the insurers.

CCR

10th Natural Disaster Day and CCR's 2019 Natural Disaster Prize

CCR organised the Natural Disaster Day ("Journée CCR Cat") for the tenth year in a row, one of the key annual events of the French insurance market. At this gathering, CCR awarded the CCR Natural Disaster Prize ("Prix CCR Cat"), which is awarded for an original and innovative PhD thesis, that seeks to increase knowledge on natural disasters and apply that knowledge to insurance and risk prevention. The 2019 winner was Fanny Benitez for her research work in the Caribbean area (Martinique, Guadeloupe, Haiti) on "Dealing or living with disasters? Capacity for adaptation and capabilities in individual and collective resilience journeys in the Caribbean area".

CCR

National Conference on Natural Hazards

(Assises Nationales des Risques Naturels) The French Ministry for the Ecological and Inclusive Transition organised the National Conference on Natural Hazards, which was held in Montpelier on 25 and 26 March 2019. This conference brought together all the principal actors in prevention, with the theme "Adapting the country to achieve a more resilient society". Bertrand Labilloy, Chief Executive Officer of CCR, and Jean-Marc Lacave, Chairman and Chief Executive Officer of Météo-France, gave keynote speeches on climate issues. CCR also shared its knowledge through contributions by its experts and site visits organised by the Montpelier Inter-Municipal Jurisdiction *(Métropole de Montpellier)*.

CCR

***Académie d'Agriculture* Prize**

On 26 September 2019, Dorothée Kapsambelis received the prize awarded by the Xavier Bernard Foundation *Académie d'Agriculture* (French Agricultural Academy) for her final essay in her agricultural engineering studies. Her paper, written under the supervision of David Moncoulon of CCR's R&D, Disaster & Agriculture Modelling department, dealt with analysis of crop losses at farm level, in the context of multi-risk climate insurance in metropolitan France.

CCR

CCR «2019 SAG Award» Prize

At the 2019 ESRI user conference in San Diego, Nathalie Orlhac, a GIS specialist and project leader in CCR's Data Science and Actuarial Department, accepted a 2019 SAG Award (Special Achievement in GIS) on behalf of the CCR Group.

CCR Re

Lecture at the Rodin Museum
"The ILS development on the Paris market"

Following the launch of the first Sidecar domiciled in France, CCR Re organized a conference in July 2019 to provide feedback on the use of Securitisation Mutual Funds in the context of a retrocession operation.

CCR Re

International meetings of the reinsurance market

Throughout the year, CCR Re took part and contributed to the international meetings held in Mumbai (India RDV), Kigali (FANAF), Dubai (Dubai World Insurance Congress), Casablanca (RDV de Casablanca), Cape Town (IUMI), Manilla (EAIC), Tel Aviv (International Reinsurance Conference), Lima (Alasa), Hammamet (GAIF), Monaco (RVS), Beirut (Fair), Madrid (World Forum), Gatineau (NICC), Moscow (Iftrip), Nice (Réavie), Baden Baden and Singapore (SIRC).

CCR Re

White Paper presentation at the Jacquemart André Museum

For the publication in September 2019 of its new Motor Third Party Liability White Paper, CCR Re presented its work on the compensation of serious bodily injury in Motor Liability in France to key representatives of the insurance and reinsurance world and the media.

TO THE HEIGHT OF OUR MISSIONS

PIERRE BLAYAU, Chairman

At the time of writing the Chairman's traditional message, for this Annual Report, France like the entire world, are going through a pandemic crisis that is ravaging populations and economies. In this terrible start of the year, CCR is facing up to its responsibilities.

Everything is being done as a priority to protect employees and the executive management quickly reorganized work in a very efficient way. CCR then made itself available to the government, firstly by contributing to the setting-up of a public support mechanism for credit-insurance, to which its entire distributable profit for 2019 will be allocated. Secondly, CCR will further be contributing to the work undertaken by insurers and reinsurers on pandemic risk.

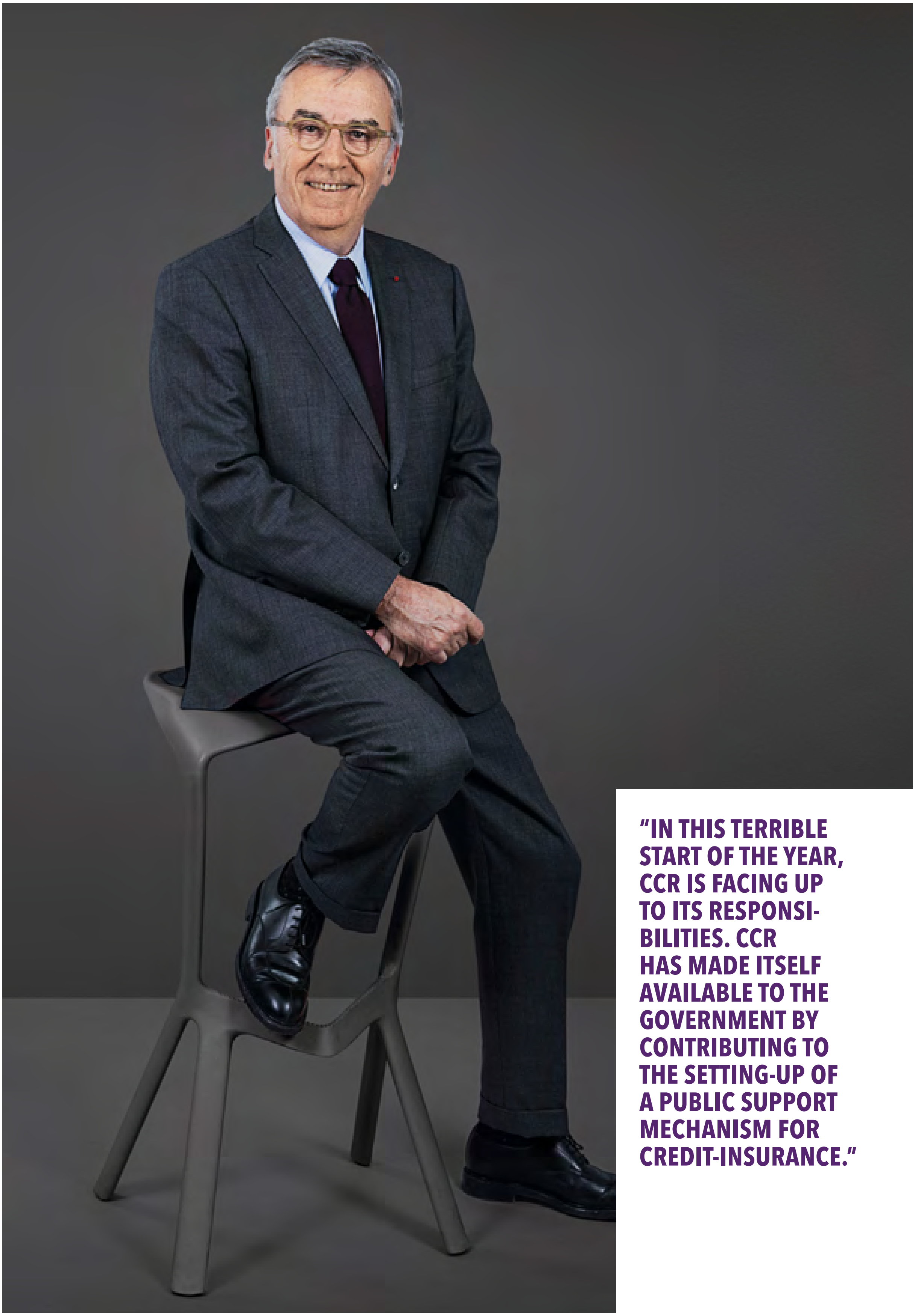
It remains difficult in these circumstances to draw up a satisfactory record justified by the results and achievements of 2019. However, the subject must be brought up as 2019 has been a successful year for us, with a 10% increase in turnover and a consolidated net profit of over 100 million euros, despite a high claims ratio. CCR has indeed compensated numerous flood victims, of Le Teil earthquake and the damage caused by an exceptional drought in metropolitan France. Furthermore, the natural catastrophe reinsurance scheme was reinforced by the renewal, for a four year duration, of the commissioning agreement with insurance companies.

At last, CCR secured final confirmation of the legality of the French public reinsurance scheme under European law. A regime envied by many other countries.

Its subsidiary, CCR Re, achieved the objectives defined in 2016 by the Renovatio strategic plan, one year ahead. This was achieved in an unprecedented environment of low interest rates and a succession of natural disasters. This momentum allows us to renew our outlook for the next three years. The new development plan calls for a business growth that is both diversified and controlled together with a modernization of the operational infrastructure.

May I express my pride to be working alongside the CCR and CCR Re teams. I wish to thank them for their agility, high expertise and efficiency, in a difficult and unprecedented environment.

Beyond the reinsurance business, CCR is also committed to its social impact. That is why, on the strength of our convictions, we have decided to renew our support to Energy Observer, the first energy self-sufficient vessel that does not emit greenhouse gases of fine particles, thanks to an unprecedented combination of renewable energies and hydrogen. Energy Observer is sailing around the world to test innovative solutions, prior to developing them on an industrial scale. More than ever, the goal is to rethink and act for a world where each one of us, each of our actions are intended to build a sustainable environment. This great project echoes the economic, social, environmental and scientific ambitions carried out by CCR.



"IN THIS TERRIBLE START OF THE YEAR, CCR IS FACING UP TO ITS RESPONSIBILITIES. CCR HAS MADE ITSELF AVAILABLE TO THE GOVERNMENT BY CONTRIBUTING TO THE SETTING-UP OF A PUBLIC SUPPORT MECHANISM FOR CREDIT-INSURANCE."

2019, A VERY GOOD YEAR

BERTRAND LABILLOY, Chief Executive Officer of CCR
Chairman and Chief Executive Officer of CCR Re

How would you sum up 2019 in a few words? In 2019, the Group achieved growth under the banner of strengthening its financial solidity, in all business lines, despite a high claims ratio. In public reinsurance, the Group proved its social utility, paying out compensation for losses while also contributing to the general interest by placing its technical expertise at the service of the State. Scientific research activities provided conclusive results on cyclone risks in Overseas Territories and on agricultural insurance. In open-market reinsurance, we continued to grow our portfolios with good returns and provided added value with research into serious bodily injury accidents in the Motor Branch. We innovated in the area of finance with the launch followed by the renewal of the 157 RE sidecar for the 2020 financial year, subscribed by investors who placed their trust in us, as well as in the area of technology with the introduction of new artificial intelligence tools. The creation of an operations division within CCR Re completes the Group transformation with the spin-off, now operationally effective, of the two core activities that make up its value.

If you were to pick out a few key figures, what would they be? The most striking figure is certainly the 21% growth in CCR Re's business, continuing the trend of 2018 and 2017; this was accompanied by an improvement in underwriting profitability, as evidenced by the reduction in the combined ratio from 99.4% to 98.1%. Another noteworthy figure is CCR Re's solvency ratio of 185%, which represents a good achievement in combination with such a hight growth level. These figures show the extent to which we have made our economic model sustainable, reinforcing our financial solidity by self-financing our growth. This has been achieved by constantly bearing down on overheads over time, since the expense ratio has been on a downward trend since 2016 to reach 5.5%. Profit from recurring activities continued to grow, to 56 million Euros, and net profit was 35 million Euros, in line with the Renovatio plan.

In addition, we have gradually modified our business portfolio in favour of the most promising lines while retaining our longstanding partnerships. In 2016, we took the decision to reduce our exposure to long-term risks. The current negative interest rate environment has proved we were right in our strategy. In 2019, S&P rated CCR Re as having a positive outlook, which provides us with even greater motivation.

For public reinsurance, premium income grew by 4% to reach 945 million Euros. The expense ratio of 2% remained under control and net profit was 67 million Euros.

What are the objectives for the next few years? These results are indeed the fruit of our convictions, but above all they are the result of an appropriate strategy steadfastly pursued. We have presented our new development plan, called "Streamline", for the next three years (2020-22). On the agenda for CCR Re: continuing to grow at the same rate, bearing down on the combined ratio, maintaining a high level of profitability and, finally, new developments for our clients. For CCR: preservation of the environment with a wiser knowledge on natural risks, for public reinsurance at the service of the community.

Another priority: continuing to transform the Group. We have made significant progress regarding processes, management tools, financial reporting and marketing. These

"2019 WAS A VERY GOOD YEAR FOR THE CCR GROUP. WE HAVE MADE OUR ECONOMIC MODEL SUSTAINABLE WHILST AT THE SAME TIME WE HAVE REINFORCED OUR FINANCIAL STRENGTH."

efforts will be pursued. We are also restructuring our information systems by introducing artificial intelligence for underwriters and operational staff, on the one hand, and, on the other, by investing in data technologies and applied research to better understand climate change and its challenges. Finally, with the efforts made in terms of ESG investments and climate risk prevention measures.

These are all areas in which we will continue to work in order to remain agile and responsive and to get the most out of our two models of public and private reinsurance.

So many exciting challenges that we will implement all together so that the coming months will reflect this very good year 2019, in an environment that is becoming increasingly complex for reinsurers.

History is never written in advance. Let us rise to these challenges!
—

A PRUDENT INVESTMENT POLICY

SÉBASTIEN JALLET,
Chief Investment Officer

KARINE ROBIDOU,
Chief Real Estate Officer

Sébastien Jallet, you have recently been appointed Chief Investment Officer. How do you see the markets in 2020? 2019 was structured around three major themes:

The Central banks turnaround: with the ECB finally opting to resume ultra-accommodative measures, rates of French OAT bonds continued to fall over the second half of the year. The Fed's monetary easing ended the tightening cycle it had embarked on in 2018.

The hope for renewed growth: after slowing sharply during the year, economic activity stabilised at the end of the year and the consensus is now that the outlook for growth will improve slightly in 2020.

Less political uncertainty: the Brexit soap opera and the negotiations between China and the United States caused investor anxiety in 2019. The announcements concerning the signature of a trade agreement between China and the United States towards the end of the year helped to reassure them. In the United Kingdom, Boris Johnson's clear majority gave him significant room for manoeuvre in the negotiations with the EU, even though a no-deal exit cannot be ruled out.

To sum up, 2019 was characterised by less uncertainty and by stabilisation of economic growth, with equity markets rising by around 30%, with the exception of the FTSE and bond markets supported by monetary policy.

In 2020, the ECB's strategic review should result in an unchanged monetary policy, with an inflation target of 2% until November, even though this will be difficult to achieve. In the United States, on the other hand, there is more scope for the Fed's key rates to be reduced in case of a sharp slowdown.

Investors' concerns are currently focused on the coronavirus, resulting in sharp falls on equity markets and securities dependent on Chinese manufacturing activity.

Brexit will also be a source of uncertainty once negotiations with the EU begin. Geopolitical tensions and the US elections will also bring volatility to the markets.

The major concerns in the United States are around the US economic cycle, which may be showing signs of weakness after eleven years of uninterrupted growth.

In this context, investors will be looking for returns in an environment of sluggish economic growth, with almost no inflation, which will test the equity markets' high levels of valuation, while low key rates will support bond markets.

How is the investment policy changing against a background of falling rates? We have increased the weighting of alternative strategies, diversified funds and private equity and reduced the weighting of high-quality bonds, which offer low or negative yields.

We will continue to diversify our investment strategies by seeking returns on trade finance strategies or strategies focused on mortgage debt. We will be prudent in our exposure to equity markets because of the high valuations. We will, however, maintain a stable weighting for our high-quality liquid assets in our bond portfolio and our cash to enable us to meet any requirements associated with claims.

How did residential and commercial and office real estate assets perform in 2019? The low interest rate environment helped to make this class of assets attractive, as did the fall in yields, creating a highly competitive market characterised in particular by rising prices and falling volumes. This enabled us to take the opportunity to sell a mature Parisian residential asset, generating a large capital gain. We continued to diversity our portfolios through indirect investments in pan-European funds and managed residential properties.

The attraction of real estate was also seen on the rental market, with vacancy rates down sharply; our Parisian assets had unprecedented occupancy rates, especially for commercial and office assets.

What are the prospects for 2020? Eurozone inflation should remain weak in 2020. Against the background of persistently low interest rates, real estate will remain an alternative for investors seeking yield with relatively low risk. Competition will therefore remain fierce.

The CCR Group is pursuing an ambitious investment programme guided by the need to select assets, with direct purchases and investments in funds in order to continue the diversification of our portfolios.

We continue to pay great attention to the liquidity and the risk-return trade-off of assets. Value creation remains a priority for both new purchases and our existing properties, with particular focus on the environmental performance of assets and even more so on the ESG criteria of our investments.

CCR, PUBLIC REINSURER

__ As a public reinsurer operating with a general interest purpose, CCR offers businesses operating in France, State-guaranteed cover against natural disasters and other risks of an exceptional nature. As the State's risk manager, CCR collects a great deal of data on extreme risks and insured property. It models these risks and shares this knowledge with public authorities and the market, with the aim of improving risk prevention.
Finally, CCR is also responsible for the accounting and financial management of public funds on behalf of the State. 2019 was marked by a series of medium-scale events, making it the fourth consecutive year with a high claims' ratio.

Following the night storms of October 23rd, 2019, a police car drives along the deserted waterfront of Narbonne Beach in southern France.


POLICE MUNICIPALE

A SUSTAINABLE COMPENSATION SYSTEM

A NEW INDUSTRY-WIDE AGREEMENT FOR THE PERIOD 2020-2023

In 2019, negotiations with representatives of the industry led to the renewal of the agreement of the public reinsurance scheme for natural disasters in France, which was due to expire on 31 December 2019. Discussions took place in a climate of consensus, with the aim of consolidating the natural disaster scheme by retaining the principle of solidarity and ensuring the system is financially sustainable. The negotiations succeeded in reinforcing a broad agreement with almost all insurers, with an innovative mechanism for commissions designed to cover the costs of managing ceding companies' claims and reward good practice in terms of prevention. These good practices are incorporated in a reference manual that is intended to be regularly updated and will enable each insurer to align itself with insurance market practice. A monitoring committee has been set up to review the manual on a regular basis.

ANOTHER YEAR WITH A HIGH LEVEL OF CLAIMS

While the first half of 2019 was particularly lenient as regards natural disasters in France, the second half of the year saw a series of events that caused significant damage.

The country experienced another drought during the summer. Although this drought varied considerably between regions, around a third of metropolitan France was affected, with the impact being particularly severe from the centre of France to the north-east. The cost for CCR is estimated at 400 million Euros.

A series of medium-scale storms and *Cévenol* episodes during the autumn, confirmed the recurring nature of these events: storms in *Occitanie* in October, floods in the south-east, and in the *Var* and *Alpes-Maritimes* departments in particular, in late November and early December, and floods in the south-east in December as rivers overflowed. An unusual event for metropolitan France also occurred towards the end of the year: the *Le Teil* earthquake, which struck the *Ardèche* and *Drôme* departments.

For CCR, claims for insured losses totalled 766 million Euros, compared to 872 million Euros in 2018 (366 million Euros excluding drought).

ANTOINE QUANTIN,
Chief Underwriting Officer, Public Reinsurance and Guaranty Funds

THIERRY COHIGNAC,
Deputy Head of Public Reinsurance and Guaranty Funds

● Within the scope of the Natural Disaster compensation scheme

● Outside the scope of the Natural Disaster compensation scheme

1/
AN EXCEPTIONAL EVENT OCCURS
Subsidence, flooding, avalanche…
The list of perils is set by the government.

2/
THE MAYOR
has 18 months from the date of occurrence to submit a file to the Prefect requesting that the government declares a Natural Disaster.

3/
THE PREFECT
submits the request to the Interministerial Commission.

4/
THE INTERMINISTERIAL COMMISSION
examines the request.
The Official Journal publishes the list of municipalities recognized by the decree.
The list may be consulted on E-liste (ccr.fr)

If not recognized as a Natural Disaster

5/
THE LOSS ADJUSTER
assesses the cost of the damages.

6/
THE INSURER
indemnifies the insured.

PRIVATE REINSURERS

7/
CCR
reinsures the insurer in accordance with the Natural Disaster compensation scheme and its general interest mission.

8/
THE STATE
reinsurers CCR providing an unlimited guarantee in the case of an extreme event.

1/
A DISASTER OCCURS
This may be a hailstorm, water damage…

2/
THE LOSS ADJUSTER
assesses the cost of the damages..

3/
THE INSURER
indemnifies the insured.

4/
THE REINSURER
provides his portion of compensation in accordance with the conditions of the contract. CCR Re provides reinsurance in the framework of its open market reinsurance offering.

OVERSEAS TERRITORIES, EVOLUTION OF CYCLONE RISK TO 2050

What led you to carry out this study in 2020? Climate change and its consequences are one of the major challenges facing our society. Recent years have indeed seen an increase in insured losses associated with natural disasters. In 2017, category 5 cyclones, Irma and Maria, caused insured losses of more than 2 billion Euros on the islands of Saint-Barthélemy and Saint-Martin. These extreme events reminded us of the vulnerability of these territories to cyclone risk and raised the question of the sustainability of the natural disaster insurance scheme in the face of an upsurge in cyclones. This research was therefore carried out to provide information on the frequency and intensity of cyclones by 2050.

It follows two earlier studies carried out on metropolitan France in 2015 and 2018 based on the IPCC's RCP scenarios 4.5 and 8.5 respectively.

The purpose of all this work is aimed at improving knowledge of extreme risks on French territory and to guide public climate change adaptation policies.

Hurricane Dorian, a tropical storm, on the way to the French West Indies on 27 August 2019. (Source NOAA 2019)

How has the partnership put in place worked? CCR has partnered with Météo-France, and numerous studies have already been carried out over the last several years with Météo-France and RiskWeatherTech, a company specialising in climate modelling.

Each partner simulates extreme events according to a clearly defined modelling chain. Upstream, Météo-France uses ARPEGE-CLIMAT, a global climate forecasting and evolution model, to generate 400 years of current climate and 400 years of 2050 climate. This innovative method makes it possible to capture extreme events that would not be captured in a trend-based approach to climate change. The WRF model used by RiskWeatherTech provides an even finer scale picture: cyclones are simulated to 1.3 km resolution. Finally, these data are fed into CCR's impact models (cyclonic winds, floods and coastal flooding) in order to put a value on insured damages.

What are the main conclusions? The study made it possible to simulate more than 96,000 tropical storms and cyclones. Wind hazard is what caused the most significant damage for category 4 and 5 cyclones, with floods and coastal flooding accounting for only 10 to 20% of total damage.

The average cost of category 5 cyclones is estimated around 7 billion Euros in Guadeloupe and 5 billion Euros in Martinique and La Réunion.

Overall, the cost of the most extreme damage could well exceed 20 billion Euros.

As regards the study of cyclonic winds, the conclusions of the CORDEX-CAM study highlight an increase in frequency of events for Guadeloupe. The results for Martinique and La Réunion are more mixed and it is less certain how things will evolve.

Finally, claims for insured losses in these overseas territories would increase by 20% by 2050 due to the increase in the average frequency of cyclones (according to CORDEX) and in sea level.

What have you learned from this study? The aim of the study is to provide some answers in terms of overseas territories' exposure to cyclone risks in the current climate and by 2050. These events are exceptional and modelling them remains a complex process because their paths are random. Taking climate change into account means we can assess the intensity of these events in the near future and thus identify effective prevention policies. Such policies must take account of the various hazards caused by cyclones (coastal flooding, stormwater run-off, river flooding and hurricane winds) in order to reduce the vulnerability of these territories.

If knowledge of the Overseas Territories exposure is refined, these studies will enable the authorities to anticipate the impact of these events, providing levers to deploy effective prevention and adaptation policies.

AGRICULTURE, MECHANISMS FOR COVERING RISKS COMES UNDER PRESSURE

PHILIPPE ROBERT,
Head of Public Funds Department

During summer 2019, the Minister for Agriculture and Food launched a consultation process with a view to improving the mechanisms for managing risks. CCR is contributing its technical expertise to these talks. It brings its experience as accounting manager for the French National Fund for Management of Agricultural Risks *(Fonds National de Gestion des Risques en Agriculture)*, and its ability to collect data as part of its task of monitoring the growth of crop insurance entrusted to it by the ministry, which enables it to model the risks and the impact of climate change. This work continues in 2020, seeking better coordination of the different mechanisms and to enable French agriculture to tackle climate issues.

THE FRENCH NATIONAL GUARANTY FUND FOR AGRICULTURAL DISASTERS

CCR has provided financial and accounting management of the French National Guaranty Fund for Agricultural Disasters (FNGRA), on behalf of the State, since 1964.

In 2019, the fund paid compensation of 150.7 million Euros in respect of agricultural disasters. Of this total, 118.8 million Euros were accounted for by damage caused by the drought in 2018 and 10 million Euros by frost damage in 2018.

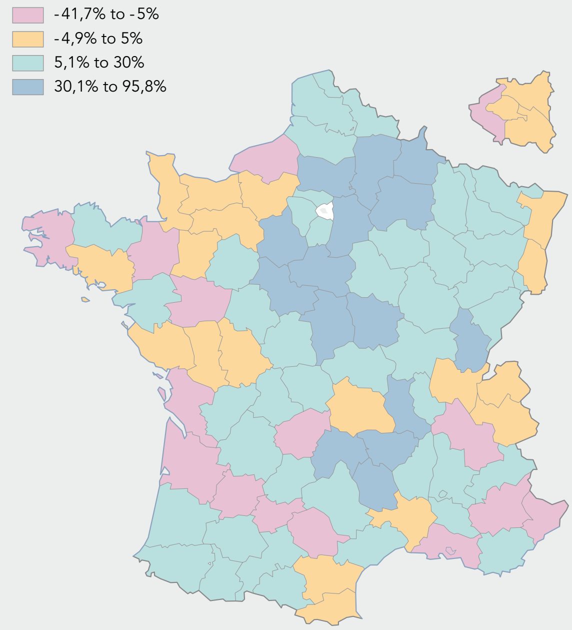
This means that, including the compensation paid in 2018, at 31 December 2019 a total of 169.4 million Euros have been paid out for the 2018 drought, in 42 departments.

CCR'S EXPERT MISSIONS FOR THE MINISTRY OF AGRICULTURE AND FOOD

In 2017, CCR entered into an agreement with the French Ministry of Agriculture and Food (MAF, Directorate General for the Economic and Agricultural Performance of Companies) to monitor multi-risk crop climate insurance. As this insurance is subsidised by the State, the aim of the CCR's study is to produce indicators that measure, how take-up of this product in the agricultural sector is evolving. For each insurance campaign, CCR feeds data from the insurers and the State into a geographical database that enables information on insurance contracts to be processed and analysed. CCR produces a summary that is published on the MAF's website and, at the same time, produces more than one hundred mapping analyses. These analyses provide a reference source that State departments, the farming industry and the insurance sector can draw on to develop this tool. In addition to this study, this single database makes it possible to respond to the MAF's requests by contributing quantitative information to the strategy talks on managing agricultural risks.

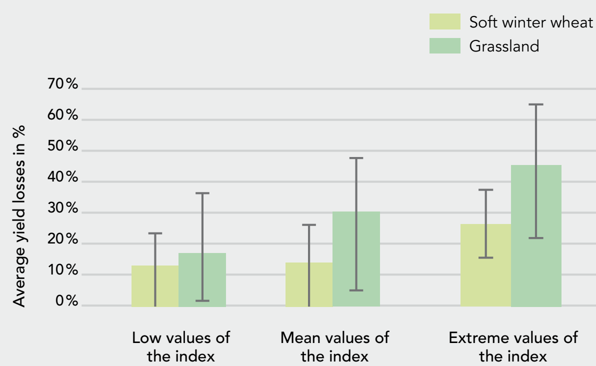
In the particular case of forage land, CCR is involved each year, as technical secretary, in organising the work of the indices validation committee, whereby a group of experts validates, for each new campaign, the indices proposed by the insurers to measure crop yields and losses following climate events. The index currently

Evolution (%) of crop insurance penetration rates between 2016 and 2017 for all crop categories.



Average and percentiles [10-90] loss ratios for winter soft wheat and grasslands and comparison with agro-climatic index created at the French farm scale for 2003 (a year of extreme drought).

The more extreme the index, the more elevated the loss ratios. The index is strongly correlated to loss ratio. To evaluate the impact of climate change in terms of production losses, the extreme values of the index are simulated.



used is based on remote sensing data combined with meteorological information and calibrated using ground-measured yield losses.

MODELLING THE IMPACT OF CLIMATE CHANGE ON VEGETABLE CROPS

For several years, CCR has been developing expertise in modelling climate risks for crops. This work began in 2016 with the design of a model based on yield loss statistics taken from the public data held by the Ministry of Agriculture (Databases Agreste: areas, yields by crop type and by department). This historical approach gives an updated view of farmers' exposure to crop losses by crop type.

Climate change needs to be incorporated in order to take this work further. CCR is therefore developing a new modelling method in partnership with Agrocampus Ouest and Météo-France. This innovative approach is based on defining coupled climate indices for different risks (drought, excess of water) projected to 2050 using Météo-France's Arpege-Climat climate model. The association between these agroclimatic indices and yield losses is established by combining the graphical land parcel data with a mapping of the indices with an 8x8km grid, over a historical period spanning over thirty years.

This thesis will provide quantitative information about the impact of climate change on the intensity and frequency of extreme events and their consequences in terms of crop losses at various levels: individual (farm), by sector, regional and national.

MODELLING, THE CONTRIBUTION OF DATA SCIENCE

As part of opening up CCR to data technologies, work using artificial intelligence and model aggregation techniques is being developed to estimate geotechnical drought problems.

FROM STATISTICS TO MACHINE LEARNING

Using several methods of machine learning, the aggregator will predict the municipalities that will be recognized as being in a state of natural disaster for drought risk and the cost to be borne by the scheme. This work is being carried out as part of a thesis in partnership with the applied mathematics laboratory of the Paris V University (MAP5) and combines structured data – for example insurance data – with unstructured data from press reviews and social networking sites. The automated extraction and analysis of the unstructured data uses web scrapping and artificial intelligence techniques.

CCR has incorporated text-mining technology into its production processes, to extract information automatically from unstructured files. The purpose of this is to automate the processing of natural disaster status recognition orders and agricultural disaster orders and improve data productivity and quality and thus be able to dedicate more time to analysis.

IMPROVING OUR KNOWLEDGE OF INSURED ASSETS

Assessing the value of insured property is a prerequisite to modelling natural disasters and quantifying the implications for the market in terms of insurance. A PhD thesis, in partnership with Mines ParisTech's Geosciences Centre, was launched in 2019. The aim is to estimate insured values using insurance data that CCR collects from its ceding companies under bilateral contracts and geolocated data from external sources. Data mining and analysis combine two approaches, one based on geostatistics and the other on Bayesian statistics, enabling insured values to be estimated. The work carried out in 2020 should confirm this overall approach and provide the first results.

OPTIMISING THE SCIENTIFIC COMPUTING INFRASTRUCTURE

CCR carried out significant work in 2019 to meet growing requirements in terms of data volumes and scientific computing. The aim was on the one hand to put in place a collaborative tool for data preparation and mining and on the other to make the scientific computing infrastructure sustainable and scalable. A blueprint is being developed and must provide a significant performance improvement from 2020 onwards.

GEORGES FARAH,
Head of Data Science
and Actuarial Management
Department

CCR has incorporated text-mining technology into its production processes.

PREVENTION, DIVERSIFYING OUR ACTIONS

The year 2019 saw a ramping up and diversification of CCR's prevention targets and actions, with support provided to the government departments responsible for the natural risks prevention policy, the creation of incentives for ceding companies to engage in or increase their prevention actions, support provided to local authorities and the provision of information to civil society stakeholders.

On June 1st, 2016, the Sauldre River flooded the "Matra" District in Romorantin without causing any significant damage. Winner of the "*Grand prix d'aménagement 2015* (Great Development Award 2015): How to better build in flood-prone areas ?", this district demonstrates that it is feasible to develop territories that are resilient to natural risks.

CONTINUED SUPPORT FOR THE DEPARTMENTS OF THE FRENCH MINISTRY FOR THE ECOLOGICAL AND INCLUSIVE TRANSITION

The level of claims recorded in the last four years de facto creates high expectations for prevention mechanisms. Public action in this area is spearheaded by the Major Natural Risks Prevention Fund (*Fonds de prévention des risques naturels majeurs* or FPRNM), for which CCR is the accounting and financial manager. This fund came under pressure in late 2019, with delegated funds in excess of two hundred million Euros mobilised mainly by local authorities.

Expenditure exceeded income for the second year in a row, leading to fears that, if this trend continues, the fund's cash will dry up by 2022. Yet there is nothing to suggest that the need for prevention could lessen in the future. In addition to the recurring disasters which emphasize all stakeholders the pressing need to protect ourselves against major natural events, there are other factors that will ensure demands on the FPRNM remain high in the coming years: the increase in new regulations, the progressive delegation to the local level of responsibility for managing aquatic environments and preventing flooding (GEMAPI), and the State's renewed commitments to the prevention of cyclones and earthquakes in the drafting of

NICOLAS BAUDUCEAU,
Head of Public Funds and Prevention Department

the Overseas Territories major natural risks act. In 2018, CCR began, on an experimental basis, to provide support to the departments of the Ministry of Ecology responsible for the prevention of natural risks and continued to do so in 2019. This support is even more relevant in view of the structural trend described above, and has notably resulted in:

• the provision of indicators combining at municipal or departmental level the FPRNM's expenditure, the exposure of the insured portfolio, historical costs and insured damage, modelled on current climate and 2050 climate taking climate change into account;
• providing national expertise and in two regions concerning prioritisation of implementation of future risk prevention plans.

This experimental support work has proved its worth by enriching the usual methods employed by the State services to guide prevention policy.

THE MAJOR 2019 BREAKTHROUGH: THE FIXED "PREVENTION" COMMISSION

The Industry agreement signed in 2019 between CCR and the French Insurance Federation (FFA) provides, for the CCR's natural disaster treaties, to include a commission linked to each insurer's natural disaster risk prevention efforts. The introduction of this commission reflects CCR's desire to incentivise its insurer clients to undertake a virtuous process of natural disasters risk prevention, based on the principle of continuous improvement. A mission statement has been drawn up setting out the methods of assessing and monitoring ceding companies' commitments in the area of natural risk prevention. This mission statement refers to a benchmark of good practice against which ceding companies will have to specify their own commitments to following this manual in 2020.

Examples of prevention actions taken from the reference manual of good practice:

• Provide information/training on prevention to distribution networks and claims departments;
• Carry out risk assessments and offer specific prevention and adaptation measures during risk visits for the business risks market and to SMEs in case of proven exposure;
• Inform its customers of the prevention actions taken by the Directorate General for the Prevention of Risks of the French Ministry for the Ecological and Inclusive Transition.

SUPPORT TO LOCAL AUTHORITIES: FIRST TESTS ARE PROMISING

The partnership value established between CCR and the local authorities responsible for flood risk prevention was tested in 2019. Three agreements were drawn up and implemented: one with the *Établissement Public Territorial de Bassin (EPTB) Seine Grands Lacs*, the other with the *Entente Oise-Aisne* and the third with the *Établissement Public Loire*. These collaboration arrangements demonstrated community interest for data, modelling results and indicators produced by CCR as part of its public reinsurance role.

CCR Key figures in 2019

945

Gross written premium
(in millions of euros)

8,176

Assets managed
at market value
(in millions of euros)

96.3%

Net combined
ratio

1.5%

Return on
investment

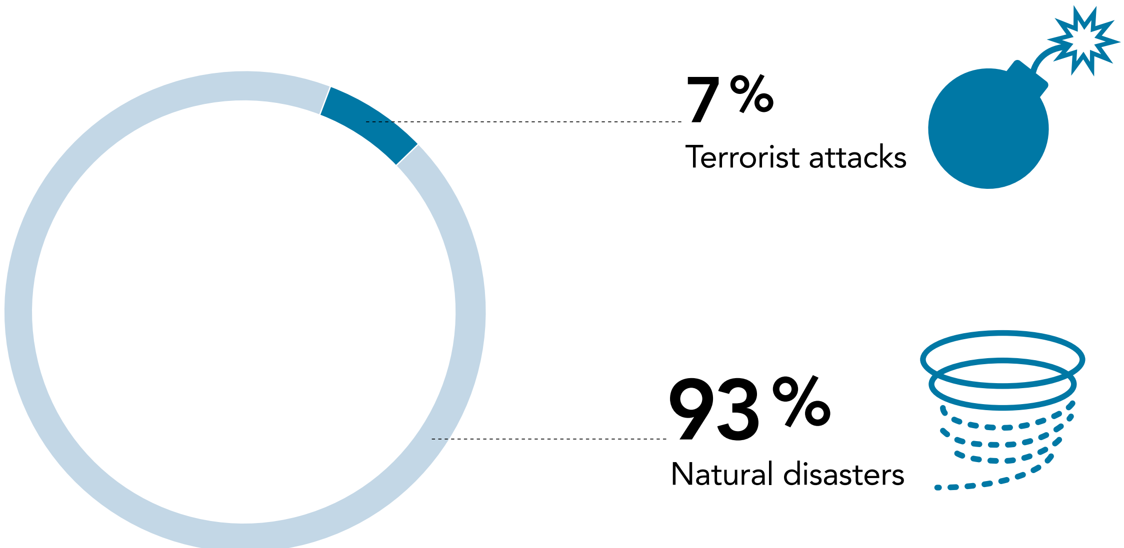
4,500

CCR natural disaster
loss absorption capacity at
market level without
the State's intervention
(in millions of euros)

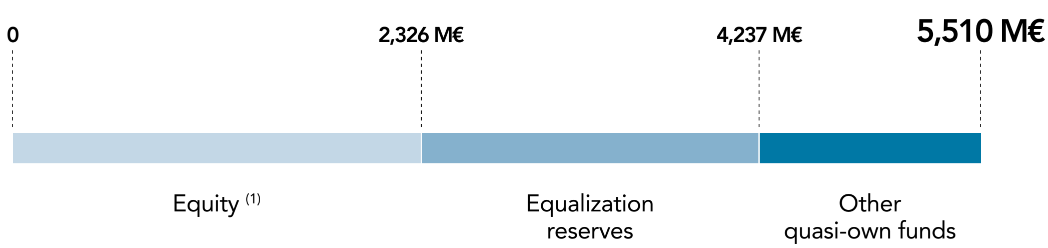
67

Net income
(in millions of euros)

Breakdown of premium income



Solvency 2 eligible own funds



[1] Valued according to the French GAAP principles, excluding valuation of unrealised capital gains and losses and excluding equalization reserves

CCR RE, INTERNATIONAL REINSURER

— In 2019, in the context of a dynamic global reinsurance market, CCR Re continued to grow; premium income was up 21% and the solvency ratio improved. This controlled growth was achieved thanks to the work of CCR Re's teams and the specific positioning of the company that is close to its clients, listens to them carefully to develop a detailed understanding of their needs, responds quickly and adopts a long-term partnership approach. These are CCR Re's values.

As typhoon Faxai approaches on 8th September 2019, residents are moving under the first heavy rain falls.

STEADY, BALANCED AND CONTROLLED GROWTH

BERTRAND LABILLOY,
Chairman and Chief Executive Officer

LAURENT MONTADOR,
Deputy Chief Executive Officer

If we look back over the year, what stands out for you in 2019? An eventful year for CCR Re! First and foremost, CCR Re's reinsurance business was up by 21%, growing for the third year in a row. Premium income reached 562 million Euros in 2019, with new business accounting for 23%, which meant that the business could continue to be diversified in line with a healthy distribution of risks across 79 countries.

2019 also saw the launch, ahead of schedule, of the new Streamline development plan. It was also a year of financial innovation with the introduction of the first French sidecar, 157 Re 19. The ACPR (the French supervisory and resolution authority) renewed its approval of the sidecar and loyal investors have placed their trust in us once more in 2020. There were also technical innovations as we introduced text-mining, e-processing and AI into our processes. Finally, it was a year which saw us achieve 93% client satisfaction, encouraging us to further develop our services.

"DIVERSIFICATION IN RISK SELECTION IS A KEY DETERMINANT OF PROFITABILITY."

LAURENT MONTADOR

How are you managing this growth in business? Growth was buoyant in France, the Middle East and Asia, particularly in China and India. Life business increased by more than 45% (at current exchange rate), with growth particularly strong in Asia, North Africa and the Middle East. Non-Life business registered a 10% growth, driven by damage and Specialty reinsurance. That sound and healthy growth is evidenced by the 132 point decline in the combined ratio to 98.1% and the 40 point reduction in the expense ratio to 5.5%, while at the same time capitalising on the opportunities that arose to increase investment, innovation, transformation of our processes and tools acquisition to better serve our ceding companies. This agility and this momentum are accompanied by good solvency conditions, with the ratio improving by 200 points to stand at 185%. Our investment

"THIS REMARKABLE PERFORMANCE CONFIRMS OUR STRATEGY."

BERTRAND LABILLOY

policy is suitably diversified to withstand market jolts and the portfolio is performing well, which is satisfying given the current environment. We are rebalancing the Life portfolio compared to Non-Life by underwriting shorter-term commitments than in the past, in view of the atypical interest rate environment which has become the new standard and by maintaining a strict geographical distribution. Faced with the effects of climate change, which we expect to intensify in some regions, we are convinced that diversification in risk selection is a key determinant of profitability.

This remarkable performance – with profit before transfers to technical reserves up by 10 million Euros to 56 million Euros – is an endorsement of our strategy. Net profit after tax was 35 million Euros, fully capitalised as in 2019 and in line with our development plan. Once again, CCR Re ended the year stronger that it began it. Above and beyond the current situation, this demonstrates that our multi-specialist and multi-regional reinsurance model is fully bearing fruit.

What specifically are you doing to keep up this pace? This dynamism is first and foremost the result of our teams' commitment to satisfying our clients. The only way for a medium-size general reinsurer like ourselves to grow in a market where prices are hardly changing is to differentiate ourselves, in order to increase volumes of good-quality business; to do this we must innovate, be visible, listen, communicate clearly and be responsive. You mention pace: speed of execution depends on speed of decision making. We benefit from being a human-scale business with a flat structure, from understanding the environment in which we work and regularly sharing this understanding with all our teams, and from a simple strategy, simple objectives and simple processes. We have centralised IT systems and a centralised control framework. And all of this is aligned in as agile a way as possible, to enable us to seize opportunities by exercising our judgment at all levels. This is not always easy in a highly competitive and fast-moving industry. We must

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remain prudent and conscious of what is within our reach, applying principles proven by experience. This is what we ask of all our teams, both underwriters, support and control functions, at all levels.

Beyond management, how does the company transform itself? CCR Re is a business that invests in its systems, in new technologies and in its commercial and financial communications and reporting. We start with an IT system that has been stable and coherent over time, with a great wealth of information. We are capitalising on these strengths to introduce text-mining and e-processing, which makes it easier for underwriting assistants and underwriters to collect data for their analytical work. We also use AI in modelling and in value-added analysis, for example in the detailed study of 2200 cases of serious bodily injury which produced results unmatched on the market. We use AI and internal and external data to produce tool prototypes and we are expanding our teams of data specialists. In 2019, we also strengthened underwriting in Latin America and the Middle East, particularly in Life business. Finally, a great deal of training and communication has been provided to ensure our teams are prepared for this sustained and controlled growth of our business. An exciting company in more ways than one!

How are you approaching 2020? With enthusiasm, continuing to grow pragmatically, maintaining the appropriate level of controls, continuing to earn the trust of our shareholder, our clients and our partners, and taking care of our teams. A reinsurer consists primarily of men and women, processes, a balance sheet and a rating. The rest will depend on the price determination cycle of the reinsurance market and the performance of the financial markets. All this is what makes reinsurance so exciting.

A STRONG IDENTITY AND FIRMLY HELD VALUES

In 2019, CCR Re successfully continued along the development path it embarked upon in 2017, buoyed by its identity as an international reinsurer and firmly held values. CCR Re is a wholly-owned subsidiary of CCR, based in Paris and with teams in Canada and the Middle East. Its purpose is to serve its clients internationally in the area of open market reinsurance, as does CCR for the French market with State-backed cover.

To enable it to do so, CCR Re has its own strong equity base, with a solvency ratio of 185%, and high-quality experts to place at the service of its clients.

LONG-TERM TRUST

Furthermore, while we are working passionately to adapt and respond to current market challenges, by both developing tools and recruiting specialists, at CCR Re we remain committed to upholding traditional values such as listening to our clients and their expectations, to seeking a global approach to their needs and to build close and long-term relationships thanks to our stable, dedicated and growing teams.

In 2019, CCR Re continued to expand the range and international reach of its internal talents by recruiting Thierry Ravoaja, a specialist in Sub-Saharan African markets, Olivier Collignon, who specialises in Life and Latin America, and Tai-Feng Yang, who strengthens our Asian team with his modelling skills and command of several languages.

These fundamental values and this focus on relationships are all the more appreciated as the world faces many uncertainties regarding both risks, of which climate

MATHIEU HALM,
Chief Retro
and Strategy Officer

PATRICK DELALLEAU,
Chief Business Development Officer

change is the clearest example, and the challenges posed by new technologies, not to mention the changing strategies of businesses as they enter and leave markets and business lines, and the mergers and acquisitions with ongoing changes in the reinsurance sector.

These organisational changes and investments have enabled us to improve both service capacity and response times for clients and partners and thus better address the challenges of acting as lead reinsurer.

Where CCR Re previously operated regularly on some sixty markets, it is now present in 79 countries and is following a policy of gradual, controlled growth within a market environment that remains highly competitive.

Rather than trying to scatter itself across the world, CCR Re is focusing on strengthening its relationships with long-term partners, while examining new opportunities either in new or other markets where it had adopted a wait-and-see approach that circumstances may have released.

CCR Re's primary objective is to serve its clients as a trusted long-term partner, offering as wide a range of skills as possible, within the framework of an open and disciplined underwriting policy.

It was in this context that CCR Re succeeded in achieving mutually satisfactory growth for almost all its partners in 2019. 1st January Renewals and those to come allow us to consider we can look forward to 2020 with confidence, ensuring we have the resources to cope with this growth and the challenges it brings with it.

RETROCESSION, INNOVATION

CCR Re's growth is therefore accompanied by a retrocession policy that allows it to increase its reinsurance capacity and protect its capital. The various retrocession programs have demonstrated their ability to absorb shocks in the past, primarily following natural disasters. CCR Re thus works each year to optimise its different retrocession arrangements in order to meet its underwriting requirements and to provide the most appropriate support for its expansion policy. As a result, CCR Re's capacity to adapt and change its retrocession cover benefits from the trust and continuity of our long-term partners.

A logical outcome of this focus on retrocession solutions was the creation in 2019 of the first French sidecar – 157 Re-19 – structured as a securitisation fund *(Fonds commun de titrisation)*, approved by the ACPR in December 2018. This approval was renewed for 157 Re-20 vintage edition.

This sidecar makes it possible to diversify the sources of retrocession but also to create a new type of partnership with investors wishing to access the reinsurance market through CCR Re's underwriting platform and thus benefit from its expertise and from an established risk portfolio.

SUSTAINED AND DISCIPLINED GROWTH

HERVÉ NESSI,
Chief Underwriting and Services Officer

Against a background of an uncertain market characterised by the pressure produced by the high level of available capacity, CCR Re recorded another highly satisfactory year.

First and foremost, premium income was up 21%, in line with previous years and ahead of the development plan. The increase was particularly notable in Life and Specialist Branches. In Life, 2019 saw CCR Re strengthen its position in the Middle East, a region in which its reputation was already widely established. The acquisition of a rating tool and renewal rights, positions CCR Re as a major player, while the Lebanon representative office has been offering quality service in Non-Life, valued by customers for more than twenty years.

In Specialty reinsurance, CCR Re anticipated the sharp reaction of the Aviation Insurance market after years of high claim levels. This trend will continue in future years. CCR Re also grew in Credit and Surety and will strengthen its team of experts in this branch in 2020.

"CCR RE MAINTAINED A STRICT AND SELECTIVE UNDERWRITING POLICY WHICH IS BEARING FRUIT."

CCR Re achieved a consistent level of growth in Non-Life. Without being market leader, CCR Re is increasingly often acting as lead reinsurer in the most important markets of its portfolio.

This growth was not achieved to the detriment of profitability, as the substantial increase in premium income was accompanied by a no less substantial fall in the combined ratio from 99.4% to 98.1% between 2018 and 2019.

A HIGH QUALITY PORTFOLIO

Finally, the quality of the portfolio is another source of satisfaction. After a process of selection that continued throughout 2016 and 2017, CCR Re began work on geographical diversification of Disaster risks in 2018 and homogenisation of risks in 2019 to reduce the volatility of its results. Some weightings were reduced and others increased in order to tighten up the size of its exposures by risk. This work will continue in the future, in close collaboration with retrocession, which plays a significant role in this regard in our ambitious growth path.

These results are particularly remarkable for being achieved against the background of a market that remains disappointing for reinsurers. The global overca-

pacity that is preventing any upward movement of premiums meant there was no turnaround in natural disaster reinsurance prices. In this environment, CCR Re maintained a strict and selective underwriting policy which is bearing fruit.

TRUSTED EXPERTS

These good results illustrate how effective the numerous transformations carried out within the company over the last three years have been, especially the gradual renewal of the underwriting teams. These teams now combine youth and experience, with a range of technical profiles, working in several languages and are highly international.

The strong commercial momentum and the positive perception of CCR Re on all markets come through clearly in the figures, particularly in the share accounted for by new business underwritten each year (22% in 2019) and in a client and partner 93% satisfaction rate in 2019.

CCR Re distinguishes itself from its competitors by positioning itself consistently and with agility as a centralized, multi-specialist reinsurer. —

STRENGTHENING TEAMS INTERNATIONALLY FOR GROWTH IN AREAS WITH HIGH POTENTIAL

EXPANSION IN THE MIDDLE EAST

The Middle East is a dynamic region with a growing middle class and strong demand for Life products, as a result of low penetration rates. In the area of health, numerous countries, the Arab Gulf states in particular, have introduced compulsory sickness insurance that is generating demand for expertise. CCR Re is positioning itself as a well-known, reputable reinsurer with expert teams in order to seize up opportunities for reinsurance growth on the Health and Life markets.

BO WERKSTROM joined CCR Re in September 2016 after living for 10 years in Dubai, where he held management positions in insurance and reinsurance companies. Within the CCR Re teams, he is principal underwriter in charge of developing the Life and Health insurance market in the MENA region.
«With more than 20 years in the sector, I have had the opportunity to work with insurance companies, a medical TPA and reinsurers. This experience has given me a good understanding of our clients' needs and the difficulties they may encounter, which helps me design the right solutions. At CCR Re, we work very closely with the Life actuarial team and, thanks to my solid training in mathematics and mathematical statistics, I am able to share the experience I have gained in actuarial matters." >

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BERTRAND PETRAS has just joined CCR Re, after 25 years working in underwriting and management roles on the European and Middle Eastern markets for recognized players in global reinsurance. Bertrand Petras, teaming up with Bo Werkstrom, is responsible for developing life and health insurance business on the Middle Eastern market.

"My role is to understand the dynamics of the market, to draw from existing relationships, to expand our footprint in the region in order to establish a portfolio, and to search out areas in which CCR Re can differentiate itself and generate good returns. I would like to build working relationships that are based on trust, create an open and frank working environment, support our clients in their development and share my expertise. Good daily coordination and interaction with Bo are required in order to provide our regional clients and brokers with the best possible service. Working within the strategic processes and mandate defined by CCR Re, we are helping to increase brand awareness." —

BO WERKSTROM & BERTRAND PETRAS

CHADI ABOU-RJEILY & PIERRE SALAMEH

LEBANON

CCR Re has been in the Beirut market for 20 years. It is one of the major players in the MENA region and a recognised leader on the local insurance market.

The Beirut office is firmly committed to operating according to the industry's highest standards and principles. The team provides expert advice to any Lebanese entity on all branches of insurance, reinsurance matters and risk management. The aim of CCR Re's representative office in Lebanon is to generate repeat business with high potential clients.

CCR Re is entirely dedicated to the needs of its customers in the MENA region and has made commendable progress, adding to its good rating. We have become a key player on the market by adopting a long-term approach and achievable objectives, which enables us to position ourselves as a leading reinsurer, even though we are faced with treaties that are somewhat unbalanced. Although numerous insurance companies would wish to be part of the CCR Re panel, we are facing growing competition in the market. —

CONSOLIDATION IN NORTH AMERICA

CANADA

CCR Re established itself in Canada in 2000 and has been underwriting Non-Life risks in Canada and the Caribbean for almost twenty years, particularly in Fire, Motor, Surety, Property Damage, Accident & Sickness and Public Liability, as well as Disaster risks. There is a large disaster insurance market in Canada, with frequent events such as forest fires, floods, hailstorms, tornadoes and violent storms affecting all provinces. Based in Toronto, the team has four underwriters.

2019 saw CCR Re record strong growth in this relatively stable market, while maintaining good results and a very high level of solvency. Towards the end of the year and following 19 years of service, the Vice-President of underwriting took a well-earned retirement. **MELISSA PLAXTON** joined the team at the end of November 2019 and took up the vacant role, while rejuvenating the team. CCR Re is thus demonstrating its commitment to the Canadian market and looking ahead with confidence. —

PIERRE DIONNE & MELISSA PLAXTON

CLÉMENCE MICHAUD & LUCAS GAHAT

STRENGTHENING THE INTERNATIONAL UNDERWRITING TEAMS

"Trusted experts you can rely on" captures the approach and spirit of CCR Re's 111 employees: experienced underwriters in their business line and market, passionate and determined to offer tailored long-term solutions.

CLÉMENCE MICHAUD "After completing my actuarial training at Lyon University's Institute of Insurance and Financial Science (ISFA), I worked as a consultant actuary and then joined CCR in 2014. I was fortunate enough to participate in projects with the Risk Division and then the Finance Division, which gave me a good overall technical view of the issues facing the company. I then decided to use my technical expertise in the role of Non-Life rating and underwriting actuary in the Southern European area, a region where I have had the opportunity to work with Lucas Gahat on numerous occasions."

LUCAS GAHAT "I also hold a Master's degree in Actuarial and Financial Science from ISFA. I joined the CCR Group in 2014 to carry out research into the rating of our >

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different types of treaties, to create and update rating tools and to participate in scientific monitoring to improve our risk knowledge. I became Life underwriter-rater for the France and Southern Europe areas in 2018. The technical skills I acquired in my initial role enabled me to better grasp the issues facing our clients and to offer the most appropriate solutions.

Clémence and I have come together to meet with our Southern European partners in order to develop comprehensive relationships with them, in Life and Non-Life Branches." —

THIERRY RAVOAJA & TAI-FENG YANG

Thierry Ravoaja and Tai-Feng Yang moved to CCR Re in May and June 2019 respectively, joining the Asia Africa department under the management of John Conan and Hervé Nessi.

THIERRY RAVOAJA joined the company as Vice-President after working on the African and Indian sub-continent markets for more than 18 years. Before joining CCR Re he was previously Regional Manager with a regional African reinsurer, responsible among others for West African markets and a Board Member of the Board of Directors of another regional reinsurer, after having headed up the African office of a Middle-East reinsurer. Thierry is a familiar figure on the African continent and brings in-depth knowledge of these regions, in which CCR Re wishes to diversify. With his knowledge of these markets' specificities coupled with his underwriting and treaty tarification experience, CCR Re intends to provide ceding companies with the best coverage at the fairest possible price.

"I am convinced that CCR Re can play a major role to support insurance in Africa in the strong growth it is experiencing today and which will go on with the further development of the various economies of the continent."

TAI-FENG YANG, as underwriter-rater for the Hong Kong, Philippines and Taiwan markets brings a wealth of experience following twelve years in disaster risk, having worked with a global reinsurance broker and a disaster modelling agency in Paris. "Joining this young, dynamic team and working with experienced colleagues in CCR Re gives me the opportunity to apply my knowledge and skills to natural disaster risks in the region I come from. Moreover, my role does not restrict me to assessing disaster risk; I have worked with Thierry on matters relating to rating techniques, how the different treaties work, market trends, etc... I believe that discussing and sharing knowledge in this way enables us to provide a better level of service and explore innovative ideas."

There is also effective collaboration with the pricing team, with whom the underwriters are in continuous contact in order to rate the different treaties as accurately as possible. —

MOTOR THIRD-PARTY LIABILITY: FIRST WHITE PAPER ON SERIOUS BODILY INJURY ACCIDENTS AND ASSOCIATED COMPENSATION COSTS

SYLVIE CHANH,
Director -
Claims and Services
Department

In September 2019, CCR Re published a white paper on compensation for serious bodily injuries under motor third-party liability. Can you tell us more about it? CCR Re has been supporting the motor third-party insurance market in France since 1975. Today, more than forty insurers trust CCR Re to support their development strategies on the French market as well as those of their subsidiaries abroad. We drew on this experience to build up a database that tracks the evolution of assessments of bodily injuries suffered by victims of road traffic accidents amounting to one million Euros or more.

In this study, carried out in partnership with Addactis, CCR Re's multi-disciplinary experts (claims, actuarial, underwriting) share their analysis of the trends observed since 2005.

What are the main lessons to be drawn? Each year the French motor insurance market pays out a total of 4.6 billion Euros to 151,000 victims. Compensation to those who have suffered the most serious bodily injuries is increasing by 7% each year. A portion of this compensation is covered by a reinsurance program.

Who are these victims? CCR Re has carried out a wide-ranging study, based on a large database that includes almost 2,200 victims, whose bodily injuries were assessed at 1 million Euros or more by the ceding companies. The majority (seven of every ten) of seriously injured victims are males. But, above all, almost one of every two is a child (41%) and two of every three seriously injured victims are aged under thirty. The study shows that three out of four victims are not drivers but passengers in damaged vehicles or pedestrians.

What is causing costs to rise? CCR Re's study shows that the rise in average costs since 2005 is concentrated in three categories of losses which account for more than two thirds of total compensation. These concern care needs (45%), future professional earning losses (11%) and future health costs (10%). Tables or scales capitalisation are therefore of critical importance when calculating reserves.

What are the issues facing reinsurance products? Our teams of experts have always been able to offer reinsurance products, suitable for the complex nature of the Motor Branch, exposed to a high volatility level as well as regulatory and legislative constraints. CCR Re is preparing for tomorrow's challenges, such as the extension of the driver's right to compensation, the wide-scale implementation of compensation in the form of annuities (2017 civil liability reform project), the expansion of new individual electric vehicles (2019 Mobility Guidance Act) and the arrival of autonomous vehicles on our roads (2019 Growth and Transformation of Businesses Act [*loi Pacte*]).

IMPLEMENTING NEW TECHNOLOGIES

ROLL-OUT OF TEXT-MINING AND E-PROCESSING

The Operations Division handles the accounting of the technical accounts forwarded by ceding companies or brokers. These complex processes involve a significant volume of data, some of which are sensitive, and are carried out in an environment that is constrained in terms of budget and processing times. The division has therefore implemented innovative solutions to resolve a simple equation: "how to process more information without increasing headcount or processing times and, above all, without relinquishing quality control?".

The e-processing project is intended to address this issue. From 2020, text-mining will allow automation of some of the accounts forwarded by brokers. The accounting teams will be able to use their expertise to analyse and check data processed automatically upstream and thus ensure optimal data quality.

"As part of its development, CCR Re is looking to technological innovation to remove manual processing and reduce end-to-end processing times. These new processes should be handling more than 10% of technical entries by the end of 2020. Time saved will enable the teams to develop more in-depth cross-cutting analysis," says Chief Operations Officer, Isabelle Bion.

ISABELLE BION,
Chief Operations Officer

ENHANCED AGILITY

The CCR Group made significant investments in mobility in 2019, with the aim of facilitating agile working and horizontal collaboration within the company and with our partners. We have launched a series of initiatives to enable colleagues to connect to their workspace and access all their applications and data from any workstation, whether within the company or outside. Promoting virtual collaboration tools enables teams to work together remotely by facilitating communication, particularly through video.

These two workstreams were launched in parallel, led by the Information Systems Division:

• Workstation **virtualisation,** with a successful first Proof of Concept, followed

by a call for tenders, a pilot phase with some thirty colleagues, and then roll-out, training and employee support.

• The introduction of **Videoconferencing screens** in the offices with both the roll-out of and training of a remote collaboration tool for all colleagues in the company.

This meant that, when the period of strikes took place early December, we were ready to activate the business continuity plan based on remote working, and CCR colleagues were able to achieve an excellent performance while working from home. This also provided the opportunity to experiment and build up collective competence in virtual collaboration methods and teleworking. —

HIND MECHBAL,
Chief Information Officer

USING ARTIFICIAL INTELLIGENCE

The use of new approaches to data processing has been one of the key issues in recent years. It is, nevertheless, a subject that must be handled with foresight to avoid potential stumbling blocks in particular human, budgetary or reputational ones. With this in mind, CCR Re has selected to establish an innovation development strategy based on projects that offer a swift structural impact while being aligned with the Group's ambitions and human values it espouses. To that extent, CCR Re subdivides its research and development according to three major pillars under the supervision of a highly agile Innovation Committee with a great deal of operational risks, processes and tools that underlie our businesses and functions. These three pillars are:

• **Automation** of recurring tasks to allow teams to make the most out of their business and functional expertise. In this regard, CCR is setting up several projects aiming to use natural language processing (NLP) to allow automatic extractraction and sort out textual data from contractual or accounting documents. There are numerous benefits: a reduction in workload, a reduction in the operational risk associated with manual analysis of information, and the reallocation of business or operational skills to high value-added tasks.

• **Deployment** of new modelling approaches for better risk management. To this end, CCR Re is working on a number of modelling projects aiming to supplement the commonly used prediction techniques (regression, GLM, etc.) with deep learning approaches (such as neural networks) in order to improve rating process and claims management. Here, too, there are numerous benefits: more accurate modelling, taking new uncertainty measurements into account, etc.

• Widespread **control and use of internal data** throughout the company to provide a better understanding of its economic, legal and competitive environment. In this regard, CCR Re is initiating various workstreams that seek to improve the quality of its data, both digital and textual, and to exploit that data, particularly by putting in place a database of standard clauses and creating data visualisation for underwriting and compliance with the GDPR. The aim is for CCR Re's teams to leverage their knowledge of its sector. —

JÉRÔME ISENBART,
Chief Risk Officer
and Actuary

CCR Re Key figures in 2019

562

Gross written premium
(in millions of euros)

2,503

Assets managed at market value
(in millions of euros)

5.2%

Life technical margin

98.1 %

Net combined ratio

56

Current income
before equalization reserve

2.7 %

Return on investment

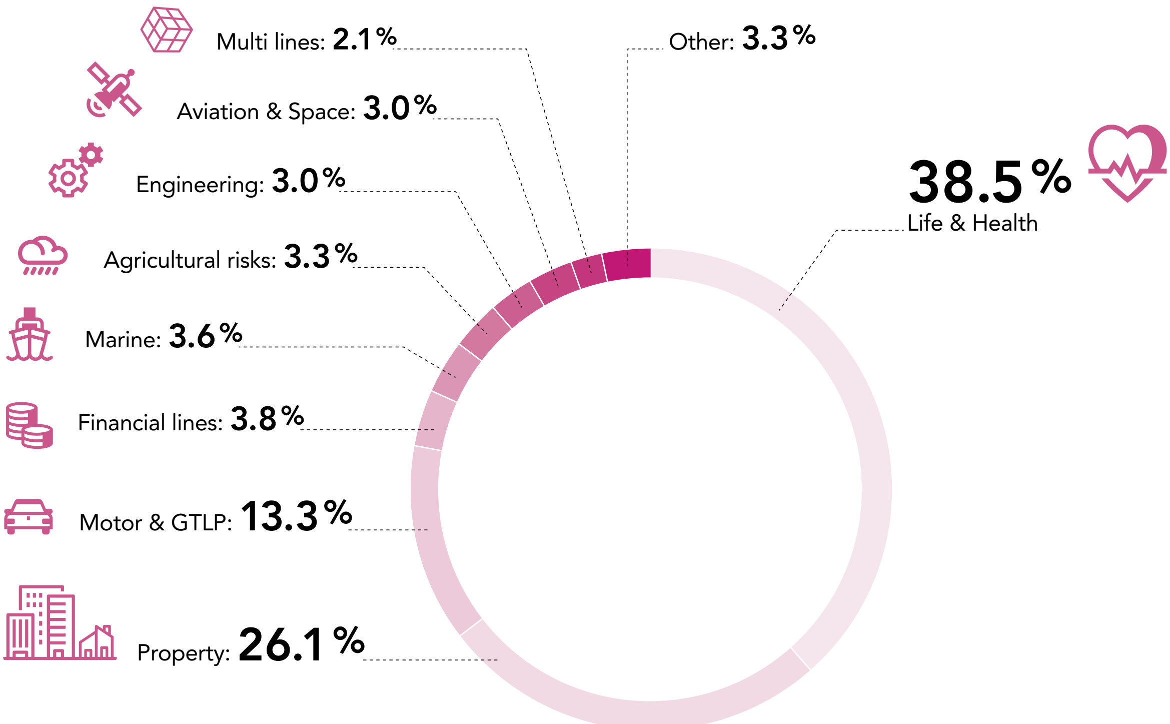
185 %

S2 ratio

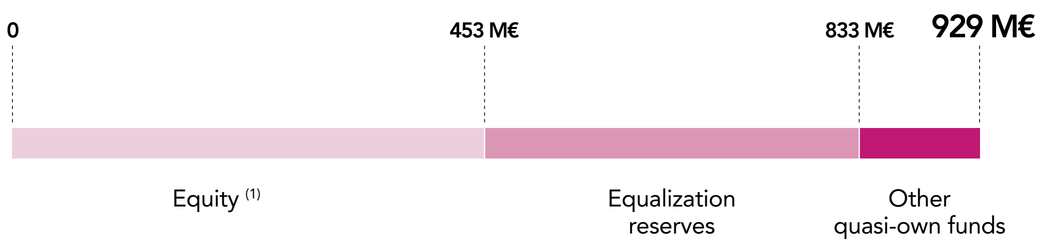
35

Net income
(in millions of euros)

Breakdown of premium income



Solvency 2 eligible own funds



(1) Valued according to the French GAAP principles, excluding valuation of unrealised capital gains and losses and excluding equalization reserves

CCR GROUP, A RESPONSIBLE COMPANY

__ CCR is a responsible and innovative Group that places social, environmental and technological issues at the heart of its actions and thinking. Teams are managed to develop individual skills, observing the principles of equality and diversity in the workplace. Furthermore the CCR Group implements an environmental, cultural and humanitarian aid sponsorship policy.

Energy Observer arriving at the Spitzberg Islands in Norway, a symbolic port of call on its Northern European odyssey, following a wholly autonomous journey in unfavourable weather conditions.


ENERGY OBSERVER
engie
DELANCHY
thélem
ACCORINVEST

259
colleagues on permanent or fixed-term contracts

19
trainees on work-linked training programmes

CONTINUING THE CCR GROUP REORGANISATION

In keeping with the Renovatio plan, and in order to provide a structure for CCR Re's development, the company created an Operations Division bringing together the management and technical accounting departments in order to optimise accounting and operational processing of treaties. At the same time, the claims management, commutations and run-offs department moved into the Underwriting Division so as to bring closer together underwriters and claims managers. These synergies have brought the company more autonomy as regards its core operational functions. Finally, the underwriting teams were strengthened by the recruitment of seven underwriters.

ENHANCING THE INDUCTION PROCESS

The Human Ressources Division provides the best possible welcome and support to new colleagues. "There are multiple challenges to meet if induction is to be effective: optimal adaptation to the role, maintaining motivation, success and progression in the longer term" underlines Maya Tesson, Head of HR Development and Career Management.

Induction days for new colleagues on work-linked training contracts and permanent contracts were held on a regular basis throughout the year, beginning with a breakfast provided by ESAT Berthier (an establishment

>

50.4%
women

49.6%
men

MARLÈNE LARSONNEUR,
Chief Human Ressources Officer

Colleagues who joined the CCR Group in 2019

45.8
(average age)

14.3
years (average length of service)

89%
of colleagues completed at least one training activity in 2019

>

that opened in 1975 and welcomes 151 disabled workers).

The purpose of these days is for new colleagues to learn more about the CCR Group. Human Ressources, Communications, IT and DPO members deliver presentations to share practical and necessary information in order to provide a better understanding of the Group. Also incorporating tours of the premises, including the "157" casual area and the fitness room.

Sessions are then scheduled with experts to enable new colleagues to acquaint themselves with the Group's core businesses.

SUPPORTING AND UPSKILLING OUR TEAMS

The transformation of the CCR Group is underpinned by its colleagues and their desire to progress. Ambitious professional training is one of the levers for motivating and retaining our teams. "I have been responsible for training within the Group for some fifteen years and I have seen our Group's commitment to training and the focus on upskilling our colleagues, maintaining existing skills and knowledge, also supporting each one of them to develop within our organisation» highlights Marie-Rose Martinez, Head of Training.

CORPORATE CITIZEN

In 2019, the CCR Group provided its colleagues with the opportunity to receive first aid training. The French Red Cross delivered training to 75 colleagues in our offices.

As part of supporting our colleagues outside work, Dr Gérald Kierzek, emergency doctor at the Hôtel Dieu hospital and host of a health programme on the Europe 1 radio station, led a "cardiovascular risks" seminar in our offices. Following this, individual cardiovascular risk screening sessions were organised.

1.4%
of the workforce incorporates disabled people

23%
of the amount of the learning tax *(taxe d'apprentissage)* paid to schools that cater for disabled pupils

Six CCR group colleagues successfully completed the data scientist training course. At the end of the nine-month training course, they gave *viva voce* presentations of their applied projects in the reinsurance sector

THE 2019 DATA SCIENTIST COURSE

Congratulations to those who successfully completed the Data Scientist training course. This training path brought a number of Group colleagues together for nine months and in November 2019 they gave *viva voce* presentations of their applied projects in the reinsurance sector.

ALPHA BAH, Head of quotation and Cat cell

"The training enabled me to learn about and understand the conventional and more advanced machine learning methods. David, Zi-Xiang and I applied our knowledge in a complex project and obtained very interesting results, well beyond those provided by more conventional statistical methods."

MARGOT PINSUN, Actuary

"We handle a lot of data in the course of our work. Data science provides us with new tools and new methods to use with the large volume of available data.
The training (in particular the project completed as part of the course) enabled me to have a better understanding of some of my team's projects but also to suggest new ways of performing daily tasks. The training also gave me the opportunity to discover a new programming language. More broadly speaking, I think that using data science could make it possible to improve some models and automate some tasks through harvesting data."

ZI-XANG WANG, Modeller

"The boom of artificial intelligence technologies and their gradual, widespread dissemination in many areas of daily life make it inevitable that they will be introduced in businesses seeking to benefit from efficiency and productivity gains and innovation in data analysis; this cannot happen without changes in working practices. The training we received covered a broad spectrum of existing techniques that are now widely used. The acquired knowledge and skills enable us to think outside the box on how to resolve existing or new problems, to perceive new horizons."

CCR GROUP, A RESPONSIBLE INVESTOR

In 2019, CCR Group reinforced its responsible investment strategy, in parallel with the definition of its responsible investment policy. An ESG Committee was set up to implement this responsible policy. It is made up of representatives of the Financial Investments, Real Estate, Risks and Actuarial departments, Public Reinsurance and the General Counsel and reports annually to the Board of Directors.

This committee is in charge of reviewing ESG risk analyses and defining responsible investment programmes.

In doing so, CCR has focused on its reinsurance business, which puts risk analysis and forecasting at the heart of the management of environmental, social and governance (ESG) issues.

CCR offers coverage against natural disasters and risks deemed uninsurable and, through its subsidiary CCR Re, multi-risk coverage to its partners. The Group has thus developed modelling expertise in the context of research work and scientific reports, particularly on meteorological and climatic risks.

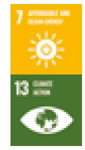
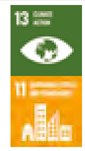
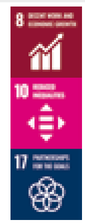
The context of global warming and the intensification of natural disasters makes the group's expertise and its general interest mission to serve policyholders and its partners in supporting change and strengthening risk prevention all the more relevant.

Thus, the three principles below are a natural consequence of CCR Group's various activities and form the foundations of its responsible investment strategy:

- **Principle of solidarity:** via the reinsurance scheme, CCR Group provides access to affordable cover for businesses and individuals against the risks of exceptional events (natural disasters);
- **Prevention and reinsurance of physical risk:** CCR Group is a leading player in the study and management of physical risk related to natural disasters and a multi-specialist in other lines of insurance;
- **Societal support:** CCR group covers the risks to which populations are exposed beyond climate risk and thus contributes to maintaining an affordable insurance offer in the most exposed regions.

It is the issues of prevention and adaptation to climate change, as well as the support of populations, that provide the framework for CCR Group's responsible investment policy.

These principles go beyond investment activities and drive all Group teams in their initiatives. A good example of this is the CCR's involvement with Energy Observer, whose objective is to revolutionise maritime transport by introducing renewable energies to limit the scale of climate change.

PILLARS	INVESTMENT POLICY AMBITIONS	ARTICLE 173 CORRESPONDENCE	CONTRIBUTION TO THE SDGs
1 PREVENTING THE TRANSITION RISK	• Taking account of the risks associated with Energy and Ecological Transition in the investment practices • Contributing to the financing of the transition	• Transition risk • Carbon footprint and trajectory of 2° C • Contributing to the transition	
2 ADAPTING TO THE PHYSICAL RISK	• Using the expertise in analysis and internal technical studies • Taking part in the financing of the assets contributing towards adapting to climate change	• Physical risk • Contributing to the adaptation	
3 SUPPORTING SOCIETAL TRANSITION	• Supporting populations and territories in the transition • Encouraging stakeholders to sign up to this approach	• ESG analysis • Right to vote	

«The aim is to integrate environmental, social and governance issues into the ESG investment policy launched in 2014 and to strengthen the consistency of responsible asset-liability management practices,» emphasises Karine Robidou, Group Chief Real Estate Officer.

The analysis of liability risks was thus integrated from the outset with the aim, for example, of measuring the impact of physical risks on investments thanks to the cutting-edge expertise developed in the analysis of natural disasters.

The Group has formalized a responsible investment charter which aims to define the major objectives of the Group's responsible investment policy for the coming years.

On each of these pillars, CCR Group chooses to adopt a two-pronged approach:

– strengthen risk management (transition risk, physical risk and ESG risks), measure their financial impact on the portfolio and integrate them into the portfolio; and in its investment policy and,

– on the other hand, contribute to the financing of issuers that are well positioned to meet the identified challenges.

CCR Group has therefore chosen a reduced number of Sustainable Development Objectives in relation to each of the three pillars in order to fully anchor its strategy in the energy, ecological and societal transition and to direct its investments towards the achievement of these objectives.

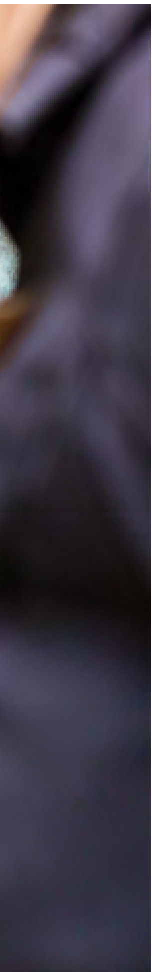
The results of these developments will be published in the report prepared under Article 173 of the Energy Transition Law.

CCR Group is also pursuing its activities in favour of environmental patronage with Energy Observer, humanitarian in cooperation with numerous associations and cultural, in partnership with the Rodin Museum.

Finally, CCR Group is committed to the cause of disability by setting up awareness-raising actions in partnership with Agefiph and provides financial support to associations that support disabled people as part of its humanitarian sponsorship policy.

CCR, ENVIRONMENTAL, CULTURAL AND SOCIAL SPONSORSHIP

Rodin Museum
The CCR Group renewed its sponsorship of the Rodin Museum in 2019, thus continuing to support the projects for restoration and acquisition of exhibits and the museum's artistic and cultural education policy.



On the left page, restoration of the bronze sculpture of Orpheus in the Rodin Museum garden.

Technical studies of the fifty portraits of Japanese actress Hanako kept at the Rodin Museum.

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Sculpture "tactile discovery" workshop organised for CCR Group employees during the Rodin Week, in November 2019.

Employee initiation to sculpture during a workhop "Sculpt your own Rodin Thinker" at the heart of the ephemeral museum created at CCR Group Headquarters.

ENERGY OBSERVER
The CCR Group has been sponsorship partner for Energy Observer since 2017, supporting a human adventure showcasing French know-how in an experiment aiming at revolutionising ocean transport in order to limit the scale of climate change.

JAKADIROULE
enables people with reduced mobility to access sport and culture, in order to create social bonds. CCR is providing support with the purchase of a Joëlette wheelchair, to facilitate ease of travel.

AHVEC[1]
provides a refuge and educational center for abandoned children in Baleveng in center North-East Cameroon.

AREGE
promotes solidarity and development in the Gentil district of Douala, Cameroon, by facilitating cooperation between France and the disadvantaged areas of Douala and by financing two water wells in the district.

FIHAVANANA
provides additional classes in the village school in Ambodivona, Madagascar. CCR supports the Batignolles Scouts of France Association in partnership with the NGO Fihavanana.

FORM'ACCUEIL
promotes the integration of immigrant workers by offering them literacy and French classes and arranging cultural trips.

LA MAISON
supports children who have witnessed domestic and family violence within the French-speaking community in the greater Toronto area.

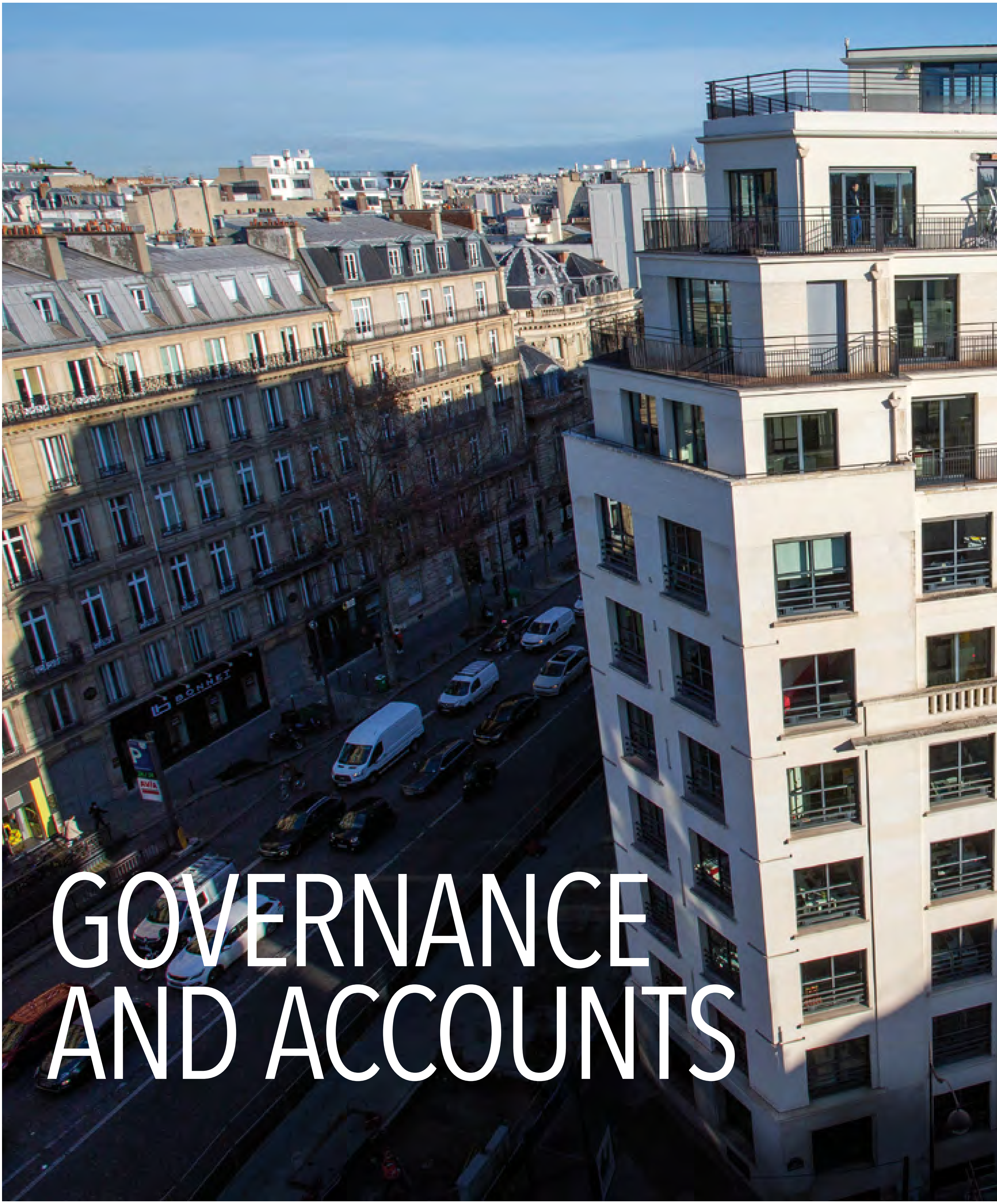
NEGAR
seeks to raise the level of education of young people in inaccessible regions of Afghanistan, carrying out local actions including organising transport, paying teachers, purchasing supplies and paying for school maintenance work.

ROSA MOUV
supports people with cancer on their care journey by offering them physical activity and rehabilitation, nutritional advice and support with personal hygiene.

(1) *Association Axe Humanitaire des Volontés Européennes et Camerounaises*

ECOACTEURS
promotes and supports the great outdoors, heritage and sustainable development actors in the *Médoc* region. CCR's support will be used to organise an awareness campaign called "Operations Family Challenge" during the European Week for Waste Reduction.

OLAGARROA
develops group activities for social inclusion of young disabled people. With the CCR Group's support, the association was able to continue offering the skiing activity during the 2019-2020 season and to help the association equip itself with office and IT equipment.



GOVERNANCE AND ACCOUNTS

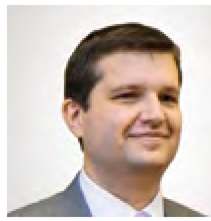
The building at 157 Haussmann that has housed the CCR Group's head office for six years obtained the BBC (low energy consumption building) label after signifiant restructuring work.

CCR,
BOARD OF DIRECTORS

PIERRE BLAYAU
Chairman

DAMIEN ANDRIES

LIONEL CORRE



FRANÇOIS DESMADRYL

PATRICE FORGET

PAULINE LECLERC-GLORIEUX

SYLVIE LEGENDRE

PATRICK LUCAS

ANTOINE MANTEL

DAVID MONCOULON

CHRISTEL SADLER

DIDIER SUARD

LAURE TOURJANSKY

CCR RE,
BOARD OF DIRECTORS

BERTRAND LABILLOY
Chairman and
Chief Executive Officer

PIERRE BLAYAU

PATRICK CERCEAU

JOHN CONAN

CHARLES LEVI

ANTOINE MANTEL

GROUPE CCR,
EXECUTIVE COMMITTEE

BERTRAND LABILLOY
Chief Executive Officer

LAURENT MONTADOR
Deputy Chief Executive Officer

ISABELLE BION
Chief Operations Officer

CHRYSTELLE BUSQUE
Chief Financial Officer

THIERRY COHIGNAC
Deputy Head of Public Reinsurance and Guaranty Funds

PATRICK DELALLEAU
Chief Business Development Officer

VINCENT GROS
General Counsel and Compliance Officer

JÉRÔME ISENBART
Chief Risk Officer and Actuary

MARLÈNE LARSONNEUR
Chief Human Ressources Officer

HIND MECHBAL
Chief Information Officer

HERVÉ NESSI
Chief Underwriting Officer

ANTOINE QUANTIN
Chief Underwriting Officer - Public Reinsurance and Guaranty Funds

KARINE ROBIDOU
Chief Real Estate Officer

ACCOUNTS AT 31 DECEMBER 2019

CCR Group consolidated accounts 70
CCR accounts 72
CCR Re accounts 76

CCR GROUP, CONSOLIDATED FINANCIAL STATEMENTS YEAR ENDED DECEMBER 31, 2019

CONSOLIDATED INCOME STATEMENT

(in thousands of euros)			2019	2018
	Non-Life reinsurance	Life reinsurance	Total	Total
Written premiums	1,396,555	110,347	1,506,902	1,371,193
Change in unearned premium reserves	(31,610)	(13,051)	(44,661)	(28,530)
Earned premiums	**1,364,945**	**97,296**	**1,462,241**	**1,342,663**
Other operating revenue	2,595	-	2,595	1,312
Investment income, net of expenses	100,293	4,089	104,382	118,267
Revenue from ordinary activities	**102,888**	**4,089**	**106,977**	**119,579**
Reinsurance claims expenses	(1,095,404)	(67,254)	(1,162,658)	(1,066,537)
Income and expenses net of ceded income and expenses	(108,661)	(3,086)	(111,747)	(115,531)
Management expenses	(131,961)	(18,839)	(150,800)	(130,630)
Expenses from ordinary activities	**(1,336,026)**	**(89,179)**	**(1,425,205)**	**(1,312,698)**
Income from ordinary activities	**131,807**	**12,206**	**144,013**	**149,544**
Investment income net of investment expenses	-	-	40,958	47,148
Other income and expenses, net	-	-	153	11
Non-recurring income and expenses, net	-	-	(131)	50
Employee profit-sharing	-	-	(276)	-
Income tax	-	-	(80,623)	(64,295)
Consolidated net income	**-**	**-**	**104,094**	**132,458**
Basic earnings per share (in euros)	-	-	34,70	44,15
Diluted earnings per share (in euros)	-	-	34,70	44,15

BALANCE SHEET – ASSETS

(in thousands of euros)	2019	2018
Intangible assets	**2,965**	**3,376**
Reinsurance investments	**8,257,827**	**8,022,184**
Real estate investments	278,592	283,148
Investments in affiliates and participating interests	6,200	6,200
Other investments	7,731,012	7,510,786
Cash deposits with ceding insurers	242,023	222,050
Reinsurers' share of technical reserves	**18,934**	**6,943**
Other receivables	**134,528**	**392,259**
Other assets	**767,922**	**560,834**
Property and equipment	2,865	2,537
Other	765,057	558,297
Accrued income and prepaid expenses	**589,441**	**572,787**
Deferred acquisition costs	43,582	36,970
Deferred tax assets	132,812	129,959
Other	413,047	405,858
Total assets	9,771,617	9,558,383

BALANCE SHEET – EQUITY AND LIABILITIES

(in thousands of euros)	2019	2018
Shareholder's equity	**2,550,184**	**2,460,890**
Share capital	60,000	60,000
Additional paid-in capital	-	-
Reserves and retained earnings	2,386,090	2,268,432
Special revaluation reserve	-	-
Net income of the year	104,094	132,458
Gross technical reserves	**7,034,399**	**6,917,080**
Life technical reserves	175,200	176,261
Non-Life technical reserves	6,859,199	6,740,819
Provisions	**14,247**	**14,576**
Other liabilities	**132,566**	**122,745**
Deferred revenue and accrued expenses	**40,221**	**43,092**
Total equity and liabilities	9,771,617	9,558,383

CCR, FINANCIAL STATEMENTS YEAR ENDED DECEMBER 31, 2019

INCOME STATEMENT

(in thousands of euros)			2019	2018
	Gross	Reinsurance	Net	Net
NON-LIFE TECHNICAL ACCOUNT				
Premiums	943,879	98,444	845,435	811,889
Change in unearned premium reserves	(7,393)	149	(7,543)	(4,391)
Earned premiums	**936,485**	**98,594**	**837,892**	**807,498**
Investment income allocated from non technical account	**66,170**	-	**66,170**	**84,440**
Other underwriting income	**567**	-	**567**	**348**
Paid claims and expenses	(818,385)	(13,943)	(804,442)	(1,170,927)
Change in outstanding claims reserves	72,893	22,546	50,347	379,172
Claims expenses	**(745,492)**	**8,603**	**(754,095)**	**(791,755)**
Profit commission	**313**	**313**	-	**(2)**
Acquisition costs	(13,839)	-	(13,839)	(14,351)
Management expenses	(4,118)	-	(4,118)	(5,089)
Reinsurance commissions received	-	(154)	154	799
Acquisition and Management expenses	**(17,957)**	**(154)**	**(17,803)**	**(18,640)**
Other underwriting expenses	**(5,949)**	-	**(5,949)**	**(7,599)**
Change in equalization reserves	**(29,999)**	-	**(29,999)**	**49,747**
Non-Life reinsurance underwriting result	**204,139**	**107 356**	**96,783**	**124,036**
LIFE TECHNICAL ACCOUNT				
Premiums	**772**	**772**	-	-
Investment revenue	-	-	-	-
Other investment income	-	-	-	-
Realized gains from Investments	-	-	-	-
Investment income	-	-	-	-
Other underwriting income	-	-	-	-
Paid claims and expenses	(127)	(124)	(2)	(4)
Change in outstanding claims reserves	(225)	(226)	-	-
Claims expenses	**(352)**	**(350)**	**(2)**	**(4)**
Life reinsurance reserves	10	10	-	-
Change in Life reinsurance reserves and other technical reserves	**10**	**10**	-	-
Profit commission	**(34)**	**(34)**	-	-
Acquisition costs	(23)	-	(23)	(7)
Management expenses	(10)	-	(10)	(3)
Reinsurance commissions received	-	(23)	23	7
Acquisition and management expenses	**(32)**	**(23)**	**(9)**	**(3)**
Internal and external investment management costs and interest	-	-	-	-
Other investment expenses	-	-	-	-
Realized Losses from Investments	-	-	-	-
Investment expenses	-	-	-	-
Other underwriting expenses	-	-	-	-
Life reinsurance underwriting result	**364**	**375**	**(12)**	**(6)**

(in thousands of euros)	2019 Net	2018 Net
NON-TECHNICAL ACCOUNT		
Non-Life reinsurance underwriting result	**96,783**	**124,036**
Life reinsurance underwriting result	**(12)**	**(6)**
Investment revenue	93,658	104,461
Other investment income	3,049	5,141
Realized gains from investments	61,168	46,972
Non-Life investment income	**157,875**	**156,573**
Internal and external investment management costs and interest	(8,639)	(8,607)
Other investment expenses	(13,041)	(12,646)
Realized Losses from Investments	(39,627)	(13,015)
Non-Life investment expenses	**(61,307)**	**(34,268)**
Investment income transferred to the Non-Life technical account	**(66,170)**	**(84,440)**
Other income	**150**	**215**
Other expenses	-	**(311)**
Non-current income	490	876
Non-recurring expenses	-	-
Non-recurring items	**490**	**876**
Employee profit-sharing	-	-
Income tax	**(60,992)**	**(15,913)**
Net income of the year	**66,818**	**146,762**

BALANCE SHEET – ASSETS

(in thousands of euros)			2019	2018
	Gross amount	Amortization, depreciation & provisions	Net amount	Net amount
Intangible assets	**73,614**	**70,655**	**2,959**	**3,369**
Real estate investments	169,947	30,848	139,099	140,612
Investments in affiliates and participating interests	435,929	-	435,929	435,929
Other investments	6,224,811	982	6,223,829	6,017,244
Cash deposits with ceding insurers	8,651	-	8,651	9,216
Investments	**6,839,339**	**31,830**	**6,807,509**	**6,603,002**
Non-Life unearned premium reserves	938	-	938	1,053
Life reinsurance reserves	3,515	-	3,515	3,205
Life outstanding claims reserves	826	-	826	597
Non-Life outstanding claims reserves	120,056	-	120,056	137,807
Other Non-Life technical reserves	-	-	-	-
Reinsurers' share of technical reserves	**125,335**	-	**125,335**	**142,662**
Reinsurance receivables	72,686	59	72,627	262,217
Prepaid payroll costs	3	-	3	-
Prepaid and recoverable taxes	28	-	28	73,043
Other receivables	78,836	70,625	8,210	9,356
Receivables	**151,552**	**70,684**	**80,868**	**344,617**
Property and equipment	14,225	11,454	2,770	2,430
Current accounts and cash	524,952	-	524,952	398,934
Other assets	**539,177**	**11,454**	**527,723**	**401,364**
Accrued interest and rental revenue	30,385	-	30,385	34,930
Life and Non-Life deferred acquisition costs	-	-	-	616
Other accrued income and prepaid expenses	131,988	-	131,988	163,967
Accrued income and prepaid expenses	**162,373**	-	**162,373**	**199,513**
Total assets	**7,891,389**	**184,624**	**7,706,766**	**7,694,526**

BALANCE SHEET – EQUITY AND LIABILITIES

(in thousands of euros)	2019	2018
Share capital	60,000	60,000
Additional paid-in capital	-	-
Revaluation reserves	2,751	2,751
Other reserves		
Special net long-term capital gains reserve	-	-
Guarantee fund reserve	1,496	1,627
Special reserve for exceptional and nuclear risks	245,215	240,277
Special reserve for natural disaster risks	1,769,987	1,652,573
Special reserve for terrorism risks	151,474	141,756
Other reserves	8,654	8,654
Special reserve for specific credit insurance risks	19,974	19,970
Reserve for the purchase of original works by living artists	91	73
Retained earnings	-	-
Net income of the year	66,818	146,762
Shareholders' equity	**2,326,460**	**2,274,442**
Non-Life unearned premium reserves	321,695	314,267
Life reinsurance reserves	3,512	3,205
Life outstanding claims reserves	868	597
Non-Life outstanding claims reserves	2,977,293	3,045,423
Equalization reserves	1,911,240	1,881,241
Other Life technical reserves	-	-
Gross technical reserves	**5,214,608**	**5,244,733**
Provisions	**11,542**	**13,483**
Insurance payables	-	-
Reinsurance payables	225	-
Other borrowings, deposits and guarantees received	1,503	1,218
Accrued payroll costs	8,708	9,636
Accrued taxes	3,131	3,481
Other payables	104,619	99,855
Other liabilities	**118,185**	**114,190**
Deferred revenue and accrued expenses	**35,970**	**47,677**
Total equity and liabilities	**7,706,766**	**7,694,526**

CCR RE, FINANCIAL STATEMENTS YEAR ENDED DECEMBER 31, 2019

INCOME STATEMENT

(in thousands of euros)			2019	2018
	Gross	Reinsurance	Net	Net
NON-LIFE TECHNICAL ACCOUNT				
Premiums	451,363	27,695	423,667	378,152
Change in unearned premium reserves	(24,068)	(658)	(23,411)	(16,119)
Earned premiums	**427,294**	**27,038**	**400,257**	**362,033**
Investment income allocated from non-technical account	**34,123**	-	**34,123**	**30,445**
Other underwriting income	**1,189**	**(840)**	**2,028**	**805**
Paid claims and expenses	(263,257)	(4,764)	(258,493)	(205,245)
Change in outstanding claims reserves	(34,747)	(11,300)	(23,447)	(48,565)
Claims expenses	**(298,004)**	**(16,064)**	**(281,940)**	**(253,810)**
Change in other technical reserves	**(8,219)**	-	**(8,219)**	**(12,118)**
Profit commission	**(6,646)**	**(360)**	**(6,286)**	**(7,161)**
Acquisition costs	(91,528)	-	(91,528)	(80,447)
Administrative expenses	(12,083)	-	(12,083)	(9,684)
Reinsurance commissions received	-	(1,709)	1,709	303
Acquisition and administrative expenses	**(103,611)**	**(1,709)**	**(101,901)**	**(89,828)**
Other underwriting expenses	**(3,779)**	**819**	**(4,598)**	**(4,468)**
Change in equalization reserves	**1,559**	-	**1,559**	**(10,873)**
Non-Life reinsurance underwriting result	**43,907**	**8,884**	**35,022**	**15,025**
LIFE TECHNICAL ACCOUNT				
Premiums	**97,296**	**4,029**	**93,268**	**56,843**
Investment revenue	3,906	-	3,906	3,796
Other investment income	28	-	28	18
Realized Gains from Investments	7,395	-	7,395	4,195
Investment income	**11,329**	-	**11,329**	**8,009**
Other underwriting income	-	-	-	**159**
Paid claims and expenses	(38,708)	(1,006)	(37,702)	(30,334)
Change in outstanding claims reserves	(19,259)	162	(19,421)	(1,982)
Claims expenses	**(57,967)**	**(844)**	**(57,123)**	**(32,317)**
Life reinsurance reserves	(1,803)	-	(1,803)	(2,515)
Other technical reserves	-	-	-	-
Change in Life reinsurance reserves and other technical reserves	**(1,803)**	-	**(1,803)**	**(2,515)**
Profit commission	**(7,482)**	**(98)**	**(7,384)**	**(5,277)**
Acquisition costs	(15,769)	-	(15,769)	(8,250)
Administrative expenses	(2,380)	-	(2,380)	(1,103)
Reinsurance commissions received	-	-	-	-
Acquisition and administrative expenses	**(18,149)**	-	**(18,149)**	**(9,353)**
Internal and external investment management expenses and interest	(1,110)	-	(1,110)	(1,108)
Other investment expenses	(356)	-	(356)	(379)
Realized losses from investments	(4,645)	-	(4,645)	(2,211)
Investment expenses	**(6,110)**	-	**(6,110)**	**(3,698)**
Other underwriting expenses	**(676)**	**4**	**(680)**	**(437)**
Investment income transferred to the non-technical account	**(1,130)**	-	**(1,130)**	**(929)**
Life reinsurance underwriting result	**15,309**	**3,091**	**12,219**	**10,487**

(in thousands of euros)	2019 Net	2018 Net
NON-TECHNICAL ACCOUNT		
Non-Life reinsurance underwriting result	**35,022**	**15,025**
Life reinsurance underwriting result	**12,219**	**10,487**
Investment revenue	32,595	34,166
Other investment income	237	161
Realized gains from investments	61,713	37,757
Non-Life investment income	**94,545**	**72,084**
Investment income allocated from the Life technical account	**1,130**	**929**
Internal and external investment management expenses and interest	(9,261)	(9,974)
Other investment expenses	(2,969)	(3,412)
Realized losses from investments	(38,762)	(19,897)
Investment expenses	**(50,992)**	**(33,282)**
Investment income transferred to the Non-Life technical account	**(34,123)**	**(30,445)**
Other income	**3**	**549**
Other expenses	-	**(442)**
Non-recurring income	3	83
Non-recurring expenses	(150)	(89)
Non-recurring items	**(147)**	**(6)**
Employee profit sharing	**(276)**	-
Income tax	**(22,484)**	**(269)**
Net income of the year	**34,897**	**34,630**

BALANCE SHEET – ASSETS

(in thousands of euros)			2019	2018
	Gross amount	Amortization, depreciation & provisions	Net amount	Net amount
Intangible assets	**92**	**86**	**7**	**6**
Real estate investments	176,587	34,344	142,244	145,286
Investments in affiliates and participating interests	6,200	-	6,200	6,200
Other investments	1,507,184	-	1,507,184	1,493,543
Cash deposits with ceding insurers	233,372	-	233,372	212,833
Investments	**1,923,343**	**34,344**	**1,888,999**	**1,857,863**
Non-Life unearned premium reserves	658	-	658	1
Life reinsurance reserves	-	-	-	-
Life outstanding claims reserves	701	-	701	862
Non-Life outstanding claims reserves	17,482	-	17,482	5,987
Other Non-Life technical reserves	-	-	-	-
Reinsurers' share of technical reserves	**18,841**		**18,841**	**6,850**
Reinsurance receivables	56,856	908	55,948	41,146
Prepaid payroll costs	134	-	134	8,111
Prepaid and recoverable taxes	3	-	3	-
Other receivables	4,524	63	4,461	6,033
Receivables	**61,516**	**971**	**60,544**	**55,290**
Property and equipment	550	456	94	106
Current accounts and cash	240,105	-	240,105	159,363
Other assets	**240,654**	**456**	**240,198**	**159,469**
Accrued interest and rental revenue	3,122	-	3,122	3,704
Life and Non-Life deferred acquisition costs	43,582	-	43,582	36,355
Other accrued income and prepaid expenses	251,237	-	251,237	209,866
Accrued income and prepaid expenses	**297,942**	-	**297,942**	**249,924**
Total assets	2,542,388	35,857	2,506,531	2,329,403

BALANCE SHEET – EQUITY AND LIABILITIES

(in thousands of euros)	2019	2018
Share capital	90,082	90,082
Additional paid-in capital	-	-
Revaluation reserves	-	-
Other reserves	328,391	293,762
Income of the year	34,897	34,630
Shareholders' equity	**453,370**	**418,473**
Subordinated debt	**75,000**	**75,000**
Non-Life unearned premium reserves	173,302	146,502
Life reinsurance reserves	89,297	73,323
Life outstanding claims reserves	83,730	63,868
Non-Life outstanding claims reserves	1,527,736	1,465,955
Life policyholders' surplus reserves	2,173	3,134
Equalization reserves	24,639	26,198
Other Non-Life technical reserves	44,156	35,936
Gross technical reserves	**1,945,032**	**1,814,917**
Non-technical provisions	**3,928**	**2,811**
Cash deposits received from reinsurers	**79**	**157**
Reinsurance payables	2,478	953
Other borrowings, deposits and guarantees received	923	960
Accrued payroll costs	5,523	4,585
Accrued taxes	5,618	2,413
Other payables	6,643	7,133
Other liabilities	**21,186**	**16,045**
Deferred revenue and accrued expenses	**7,936**	**2,000**
Total equity and liabilities	2,506,531	2,329,403

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Activity Report published by CCR - June 2020

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Conception, editing, production: story-building.fr
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157, bd Haussmann - 75008 Paris - France - Phone: +33 1 44 35 31 00

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