

# PUBLIC COMPANY AND GLOBAL REINSURER

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## 02 CCR in 2016

- 04 Message from the Chairman,  
**Pierre Blayau**
- 06 2016, milestones
- 12 Management report by the CEO,  
**Bertrand Labilloy**
- 15 A year of reinsurance
- 20 A year of investment
- 22 Group key figures



## 24 CCR, public reinsurer

- 26 Natural disaster reinsurance:  
a robust model
- 29 A dedicated team with expert  
knowledge of extreme risks
- 30 Terrorism risk: consolidating existing  
mechanisms
- 32 Public fund management: an added  
source of expertise



## 34 CCR Re, an open-market reinsurer

- 36 Guiding principles of the subsidiarization
- 38 Performing the operation
- 40 Key figures and personnel



## 42 CCR, a corporate citizen

- 44 Fostering mobility and attracting  
young talent
- 46 Cultural and social sponsorship
- 48 Recycling, taking action  
for the environment



## 50 Governance and financial results

- 52 Board of directors
- 54 Executive committee
- 56 Financial results







# PROFILE & MISSIONS

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A reinsurance group wholly-owned by the State of France, the *Caisse Centrale de Réassurance* stands among the top 25 players in international reinsurance. Backed by the State's guarantee and working in the general interest, it provides the French market with coverage against natural disasters and other extreme risks. Since January 1, 2017, its subsidiary, CCR Re, operates in the life, non-life and specialty lines in France as well as in sixty countries worldwide.

The company is backed by proven expertise in risk modeling and employs 271 professionals who are motivated by the satisfaction of their clients and deploy their talents with the highest degree of professionalism. Thanks to recognized skills and expertise that ensure profitability and sustainability, CCR consistently meets the demands of its mission and the expectations of its shareholder.

# CCR

## IN 2016

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True to its missions, CCR continued in 2016 to further the quality of the service it provides to the community in terms of public reinsurance and extreme risk expertise, and pursued the repositioning of its competitive open market activities thereby improving profitability.

2016 will remain a decisive year for CCR with the subsidiarization of its open market reinsurance activities, the signing of a new agreement with the State governing the operation of its public missions and the validation of the natural disaster compensation scheme by the EC competition authorities.

"In 2016,  
we successfully  
defended  
the specificity  
of our business  
model before  
the European  
authorities."



# A YEAR OF TRANSFORMATION

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**PIERRE BLAYAU**, Chairman

**2016** vintage was a year of transformation for CCR with the revision of the convention that sets its missions and financial relationships with the State and the subsidiarization of our open market reinsurance activities. These two major changes marked CCR's entry into the era of transparency. Now, our actions in the domain of public reinsurance may all be judged on the basis of the missions and obligations defined by the new agreement. Likewise, our economic performance in open market reinsurance may also be judged on the basis of CCR Re's financial statements.

The EC competition authorities' confirmation of the compliance of the natural disaster compensation scheme, and of the CCR model that comprises its core, has enhanced the sustainability of the public reinsurance schemes operated by CCR with the guarantee of the State as well as the legitimacy of CCR's involvement in traditional reinsurance activities in France and internationally.

From an operational perspective, CCR was occupied throughout 2016 with natural disaster losses of particular importance. The floods of May-June in France, the second largest loss to impact the natural disaster scheme, reminded us of the scheme's usefulness, while CCR Re faced a number of disasters such as the Fort McMurray fire and the earthquake in Taiwan. These losses had no effect whatsoever on the financial strength of CCR and the dynamics of the Group remain intact in both its segments while, in particular, CCR Re's business forecast has progressed.

Today, after two years of transformation, CCR has initiated its new strategic plan. In an environment destined to remain difficult, we shall continue to adapt and modernize. Our public reinsurance expertise is highly recognized: we shall once again enhance this service to the community and go beyond the simple financial coverage of risks. The creation of CCR Re is a new departure for open market reinsurance after 70 years of operation with renewed expectations in terms of return on capital and services rendered to cedants. Our road map for 2017 and the years to come has already been laid down.





Hazards  
and vulnerability  
modeling



Over

**2000**

municipalities recognized  
as natural disaster  
zones (from May 25 to  
June 8, 2016)


**€1.2 bn**

is the estimated cost  
to the insurance market as  
a result of the flooding  
that affected the northern  
half of France

**€10 to 20 bn**

is the estimated cost of insured  
losses should an event similar  
to the Seine flood of 1910 occur





## CCR'S EXPERTS



### "A MAJOR EVENT WITH AN IMPACT WELL BELOW OTHER POSSIBLE SCENARIOS"

"All perils combined, these floods represent the second most costly event for the French insurance market after the draught of 2003 and since the inception of the natural disaster compensation scheme in 1982. It is the most significant flood event to have ever impacted the scheme. Taking into account the storms that swept parts of northern and eastern France, 2,000 municipalities were recognized as natural disaster zones within the period from May 25 to June 8, 2016 and CCR estimates that the cost to the market for these events will reach 1.2 billion euros. Despite its significance,

this loss does not affect the balance of the natural disaster compensation system that can meet the demands of a single 5.7-billion-euro event relying solely on the use of CCR and market resources. According to research conducted in the framework of the Sequana simulation exercise, an event similar to the Seine flood of 1910 could result in losses of 10 to 20 billion euros to be paid through the natural disaster scheme depending on the scenario. According to OECD, the overall amount of economic damage could reach 40 billion euros."

**THIERRY COHIGNAC**, Senior Vice President Modeling & Actuarial Management, Public Funds and Reinsurance Department

## Floods in the northern half of France (May-June 2016)

In May and June 2016, record rainfall in the Center and Ile-de-France regions triggered flooding of the Seine river and its tributaries. The Loing river rose 38 centimeters above the level recorded during the flood of 1910, reaching 4.63 meters. Exceptionally high levels were also recorded for other Seine tributaries causing significant damage in the towns of Montargis, Nemours, Gif-sur-Yvette, Longjumeau and Melun. As for the Seine, its water levels surpassed that of a 6-meter major flood for the 37th time since 1649 and 6.10 meters were recorded in Paris at the Austerlitz bridge.

## CCR'S EXPERTS



### "THE WEAKNESS OF HIGH-TECH COMPANIES"

"This Southern Taiwan Earthquake could have had only minor consequences. However, insured damages were considerable amounting to almost 770 million US dollars. The event underscored the weakness of the high-tech industry: approximately 10 high-tech companies accounted for no less than 90% of insured damages. These companies are concentrated within an industrial area which activity came to an abrupt stop. The fragile machines used to produce microchips and plasma screens needed to be replaced or recalibrated and significant business interruption losses were added to the cost of material damages. As for individual risks, only 148 homeowners policies were affected. For CCR, the earthquake represents a loss of 11 million euros that was settled in a timely manner to the benefit of the cedants. The regulator reacted immediately triggering an increase in insurance rates for the electronic industry while the local operators placed the major portion of their exposures in the international facultative reinsurance market."

**JEAN-MARIE DOUCHIN,**  
Vice President - Treaties  
Asia / Africa



## Yunlin, Southern Taiwan (February 2016)

On February 6, 2016 towards 4:00 a.m., an earthquake of a magnitude of 6.4 on the Richter scale struck the southern portion of Taiwan near Tainan, the country's sixth largest city. Although the strong quake was felt only within a limited perimeter that included the cities of Kaohsiung and Tainan, it caused 117 fatalities, 115 of which were attributed to the collapse of a single 17-story building. Located on the Pacific Ring of Fire, the island of Taiwan is prone to frequent earthquakes.



## CCR'S EXPERTS



### "LESSONS TO BE LEARNED"

"With the significant amount of large catastrophe losses experienced by the Canadian insurance industry over the last 8 years, companies are now able to respond quickly and efficiently to large events. And this was particularly evident in the response to the wildfire. As usual, there are lessons to be learned for the insurance industry, municipalities and homeowners alike. It will take several years to rebuild, and insureds are running out of additional living expenses. Insurance to value is also becoming an issue. Municipalities must invest more in prevention, and homeowners should learn to properly fire-proof their homes. CCR RE being a significant player in the Canadian reinsurance marketplace, it will bear a portion of this significant loss, albeit to a lesser degree than its market share."

**PIERRE DIONNE**, Senior  
Vice-President and Chief Agent

## Fort McMurray, Canada (May 2016)

On May 1, 2016, a wildfire began southwest of Fort McMurray, in the Canadian province of Alberta. Fueled by a dry winter, unseasonably hot temperature and strong winds, the fire quickly gets out of control. On May 3, it jumps the half a kilometer wide Athabasca River, forcing the evacuation of the 88,000 residents of Fort McMurray, and threatening the Athabasca oil sands operations. The wildfire destroyed approximately 2,400 homes and buildings. At an estimated insured cost of \$3.6 billion Canadian dollars, it has become the costliest disaster in Canadian history, and the biggest wildfire loss worldwide.



## National Conference on Natural Hazards, Marseille (March 2016)

The third edition of the National Conference on Natural Hazards was held in Marseilles in March 2016. Organized by the French Ministry of Ecology, Sustainable Development and the Sea, the conference traditionally brings together organizations that work to further our understanding of natural disasters and the related prevention measures. For two full days, 900 participants exchanged information on a number of issues. As a partner to the event, CCR organized a round table concerning the impact of climate change on the cost of natural disasters.



## CCR celebrates its 70th year at the Musée d'Orsay (June 2016)

CCR celebrated its 70th anniversary in 2016. This was the occasion to bring together around 300 clients and business partners for a reception at the Musée d'Orsay and to reminisce on the major events in the company's history since its creation in 1946.





## Presentation of CCR Re to the market (September 2016)

On the eve of the international Reinsurance Rendez-vous in Monte Carlo, CCR confirmed the subsidiarization of its open market reinsurance activities, transferred on January 1, 2017 to a new entity: CCR Re.



## Creation of IFTRIP, Canberra (October 2016)

The International Forum of Terrorism Risk (Re) Insurance Pools (IFTRIP) was launched in October 2016 at the time of the Global Terrorism Risk Insurance Conference organized by OECD in Canberra, Australia. The forum, whose aim is to foster closer ties among terrorism insurance carriers worldwide, will meet for the first time in Paris in 2017. CCR, as a sponsor and an observer member to this event, will present its expertise at the time of the forum.

# RESULTS FOR 2016 MARKED BY THE FLOODS IN FRANCE

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**BERTRAND LABILLOY**, Chief Executive Officer

## **How would you characterize CCR's activity for 2016?**

2016 is an excellent vintage for CCR from a commercial perspective. Premium income from open market reinsurance increased by 5.8% to 443 million euros. This growth in activity, in a global market environment on the downturn, was not achieved to the detriment of our underwriting discipline but is the result of our significant efforts to consolidate and re-orientate the portfolio undertaken over the past few years. In particular, we rebalanced the business mix to the benefit of the life reinsurance segment which represents the essential portion of net growth. Overall, premium income for the CCR Group increased by 2.2% to 1,315 million euros due to the stability of premium income from public reinsurance, compared to the 872 million euros posted in 2015.

## **The year 2016 was marked by major disasters in France and elsewhere in the world. What impact did they have on CCR?**

In France, the floods that occurred near the end of May and the beginning of June 2016 caused an estimated 1.2 billion euros of damages in the Center region, the Paris basin as well as in the northern and eastern parts of France. The resulting cost to CCR amounts to 623 million euros which represents the second largest loss – the largest flood event – ever recorded since the inception of the natural disaster compensation scheme in 1982. A major portion of the impact on CCR's underwriting results was however offset due to a capital equalization reserves release of 240 million euros. Outside France, CCR also faced an accumulation of natural disasters including the Fort McMurray fire for 9 million euros and the earthquake in Taiwan for 11 million euros. The impact on the 2016 results of the open market reinsurance segment is significant. However, this has not caused a decrease in results compared to 2015 since that year was marked by an exceptional strengthening of reserves in amounts comparable to those of the losses.

>

"CCR had an excellent 2016. The growth in activity is the result of our significant efforts to consolidate and re-orientate the portfolio undertaken over the past few years."



- > For the rest, CCR Re has reaped the early rewards of its restrictive and balanced underwriting policy implemented that enabled it to significantly improve its underwriting results compared to 2015.

**In the context of a complicated financial market, what were the results of your investment policy?**

The consolidated financial and real estate investments of the CCR Group amounted to almost 10 billion euros at the end of 2016. Net investment income for 2016 was stable compared to 2015 at 174 million euros. This amount comprises ordinary financial income of 121 million euros and financial gains, notably real-estate-related, of 58 million euros. The overall performance of the portfolio therefore rose to 1.9%, a rate that should be considered in light of its overall duration which is quite short, and of the conservative profile of the asset portfolio.

**Which lessons for CCR do you draw from the persistently weak reinsurance and interest rates?**

As is the case at every low point in the cycle, the priority is not to charge CCR balance sheet with underperforming risks, but to improve the quality of service so as to avoid falling into a deflationary spiral, and to improve the efficiency of internal management processes in order to reduce the break-even point. This is what we have done over the past two years with the first tangible results since 2016 internal management expenses remained stable on the whole at close to 5.25% for consolidated premiums. Notwithstanding

**"In 2017, CCR will pursue the modernization of its reinsurance and public fund management processes."**

exceptional expenses relating to the creation of CCR Re, the actual amount of internal management expenses even decreased.

**All in all, was 2016 a good year for CCR?**

Overall, CCR Group consolidated net profit stood at 141 million euros, slightly less than the budget forecast. This result was achieved despite significant loss experience demonstrating the solidity of CCR's business model. Consequently, CCR remains capable of covering a natural disaster in excess of a market cost of 5.6 billion euros without claiming to the State guarantee while it continued to strengthen its terrorism and exceptional risk reserves.

**What are the perspectives for 2017?**

In 2017, CCR will pursue the modernization of its reinsurance and public fund management processes following the revision of the agreement that binds the Group to the State while continuing to participate in industry discussions on the furthering of the GAREAT and natural disaster compensation schemes. As concerns CCR Re, we are pursuing the reorientation of its underwriting and investment policies so as to enhance return on risk, as well as our efforts to modernize the company so as it may be better prepared to make the best of the next upturn in the reinsurance market.



# PUBLIC-REINSURANCE: A YEAR OF SIGNIFICANT NATURAL DISASTER LOSSES

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In 2016, public reinsurance schemes did not undergo any structural development, from the natural disaster compensation scheme to the scheme providing coverage of terrorist acts (which is scheduled for review in 2018) and including the reinsurance scheme for exceptional risks relating to the transportation of goods.

**T**he 2016 renewal season was characterized by a stability in reinsurance portfolios and in premium income. Resultantly, 2016 premium income from natural disaster reinsurance stood at 794.4 million euros, terrorism risk 69.7 million and exceptional risks 7.8 million. With respect to natural disaster losses, 2016 recorded the costliest flood event to date and since the inception of the compensation scheme in 1982, occurring in the Seine and Loire basins in May and June. Estimated losses are currently expected to reach 1 billion euros. Furthermore, other flood events occurred within the same period affecting the Center and Normandy regions as well as the northern and eastern parts of France. In total, the cost of flood losses impacting the compensation scheme comes to 1.2 billion euros with over half of this amount to be borne by CCR. To make the impact of these heavy “flood” losses even worse, a number of losses due to geotechnical subsidence (damages to structures) occurred, the cost of which is not yet known but could also be significant as almost 1,400 municipalities requested recognition of a state of natural disaster in respect of this event.

## **LEGITIMATE PUBLIC REINSURANCE**

2016 was also the year in which CCR's public reinsurance operations were deemed legitimate

by the European authorities. Already recognized as compliant with the French Constitution by the Constitutional Council, the natural disaster reinsurance scheme proposed by CCR was officially declared compatible with EC competition law on September 26, 2016. This decision confirms the legitimacy of the natural disaster and reinsurance schemes operated by CCR at both the French and European levels. One of the major efforts of the year involved the preparation of the new agreement between the State and CCR which stipulated and reaffirmed the general interest missions confided to CCR by the State and the related operating principles.

The terms and procedures of the commitment and of the payment of guarantees granted to CCR by the State for certain reinsurance operations were also reviewed. This document underscores, in its preamble, the role delegated to CCR by the State concerning the understanding and management of risks and by way of which new missions may be granted in the future, as well as the fact that the market may not always be able to >

**“CCR has developed highly recognized expertise in risk assessment and modeling.”**



**Overflow**  
Water level  
High  
Low  
Building  
Main watercourses

**Run-off**  
Flow  
High  
Low  
Industrial building

- The Public Funds department was particularly occupied finalizing the implementation of the FAPDS or Fund for losses arising from preventive, diagnostic and healthcare services provided by private healthcare professionals. The fund also held its first Management committee meeting. Above all, department staff were busy drafting an agreement between the fund and the French office for the compensation of medical accidents (ONIAM) governing claims management.

Insofar as concerns actuarial and modeling activities, the year 2016 was also particularly dense. A rapid simulation of the Seine flood was performed using the “flood” model developed by CCR. The model enabled the teams to communicate an estimated cost of insured damages on June 7, the day following the event. Subsequently, this estimate was confirmed on the basis of surveys provided by cedents. Other important advances in modeling should also be mentioned, namely the research conducted in cooperation with the French Geological Survey (BRGM) on earthquake risk exposure for French homeowners and businesses, or the development of a model used to estimate the cost of damage to crops due to adverse weather conditions for a major portion of the farmland of mainland France (see page 29). The quality of the services provided to cedents was also improved with the online release of Ceres. This data tool enables CCR’s clients to analyze their exposure to marine submersion risk.



## "BUILDING STRONG AND SUSTAINABLE GUARANTEES"

"The reinsurance covers developed by CCR in the framework of its public missions must provide the contracting insurance companies with a solid long-term guarantee. To build these covers, our teams rely on generally accepted reinsurance practices and techniques. In this manner, the covers are consistently reviewed

to ensure that they are effectively adapted to evolving trends in loss experience or in legislation. Our covers include mechanisms that prevent the transfer of excessive levels of risk to the State while enabling broad mutualization."

**PATRICK BIDAN**, Chief Underwriting Officer - Public Reinsurance and Guaranty Funds



## "GOING BEYOND EXISTING MECHANISMS"

"The role of CCR, as the State's risk manager, also means going beyond existing mechanisms by making full use of the data collected, the tools in place and, above all, the expertise of CCR's teams. In this way, CCR makes a useful contribution to

industry discussion on the coverage of extreme risks and serves the government authorities by providing its know-how and far-reaching knowledge of reinsurance solutions that are applied in other countries."

**ANTOINE QUANTIN**, Deputy Underwriting Officer - Public Reinsurance and Guaranty Funds

# OPEN MARKET REINSURANCE, A PIVOTAL YEAR

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For the open market reinsurance segment, 2016 was marked by the creation of CCR Re, a new company focused on the development of the open market reinsurance portfolio. It was also marked by the resurgence of large losses.

The teams were very busy throughout the year developing a conservative and realistic 2017-2020 business plan for the future subsidiary and operating the transfer of the portfolio from CCR to CCR Re while providing close support to cedents. And all this was achieved in addition to the day-to-day operation of the business! The project, which was very well received by the market, was supported by the approval of the French Prudential Control and Resolution Authority (ACPR) and received the validation of the Brussels Commission. The new operational entity was created on January 1, 2017 within tight deadlines.

## A RESURGENCE OF LARGE CAT LOSSES

Although 2014 and 2015 were relatively spared from large Cat losses, 2016 recorded losses at levels that fell within the average of the last ten years. What is astounding is the absence of any correlation between, on the one hand, the significant loss of life and economic damages with, on the other hand, the damages compensated by the insurance and reinsurance industry.

Thusly, while 2015 was a deadly year recording 20,000 fatalities for 198 natural disaster events (Sigma - Swiss Re), 2016 recorded "only" 11,000 fatalities for a total of 327 natural disaster events. Nonetheless, the estimated cost of insured damages is 54 billion US dollars compared to 38 billion in 2015, which had a material impact on the reinsurance industry. In detail, hurricane

Matthew occurred in October causing an estimated 12 billion US dollars in economic losses of which 4 billion was insured. The event that gained most media attention was the earthquake that struck Japan on April 16 causing between 25 and 30 billion US dollars in economic damages a total of 4.9 billion of which represents insured damages making it the most significant insured loss for the year. The Fort Mc Murray forest fire that swept through parts of Canada, with an estimated economic cost of 3.95 billion US dollars and an insured cost of 2.8 billion, was the most spectacular loss event of 2016.

Although the losses incurred in the US or in New Zealand had no effect on CCR, this was not the case for the earthquake that struck Taiwan which, with 11 million euros in losses, was the costliest natural disaster event of the 2016

financial year for CCR. Despite the relatively modest cost of this loss, the small margins of retention among the companies on the market resulted in a transfer of the major portion of the loss to the reinsurers.

**"Following the course that has already been set, CCR Re intends to pursue, in 2017, the development of a more diversified and balanced global portfolio combined with effective risk management in cooperation with its long-term partners."**





## "A GRADUAL SHIFT IN UNDERWRITING POLICY "

"In terms of underwriting operations and in view of a market in which reinsurance margins were under pressure, CCR furthered the development of its business model in 2016. The company worked on a gradual change of the balance of its portfolio by increasing the weight of

the Life and Specialty lines to the detriment of the Motor and proportional Property lines. It also grew the geographic base of its more volatile business such as Natural Disaster Property, Agriculture, Terrorism and Credit."

**PATRICK DELALLEAU,**  
CUO Global



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**HERVÉ NESSI,**  
CUO Markets



# INVESTMENT POLICY: A COURSE MAINTAINED IN A TOXIC ENVIRONMENT

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**PIERRE COUMES,**  
Head of Financial Investments

**2016 was supposed to have been a year full of dangers, was that the case?**

Although 2016 was a relatively good year with respect to the performance of financial assets, investors indeed suffered under the effects of considerable pressure. With the approval of Brexit at the end of June followed by the election of a conservative US president in November, market expectations were repeatedly contradicted. Although these events did not bring on a persistent downward trend in asset prices or increase in aversion to risk, they did generate a substantial amount of restlessness within the markets. From an economic perspective, the net improvement of the economic activity for industry and services, in all the major economic regions of the world, was reflected by gains in the equity markets in November and December.

Concurrently, the developed countries recorded new increases in inflation due to increases in the price of crude oil and raw materials. These developments put upward pressure on long-term interest rates and had a positive impact on banking stocks.

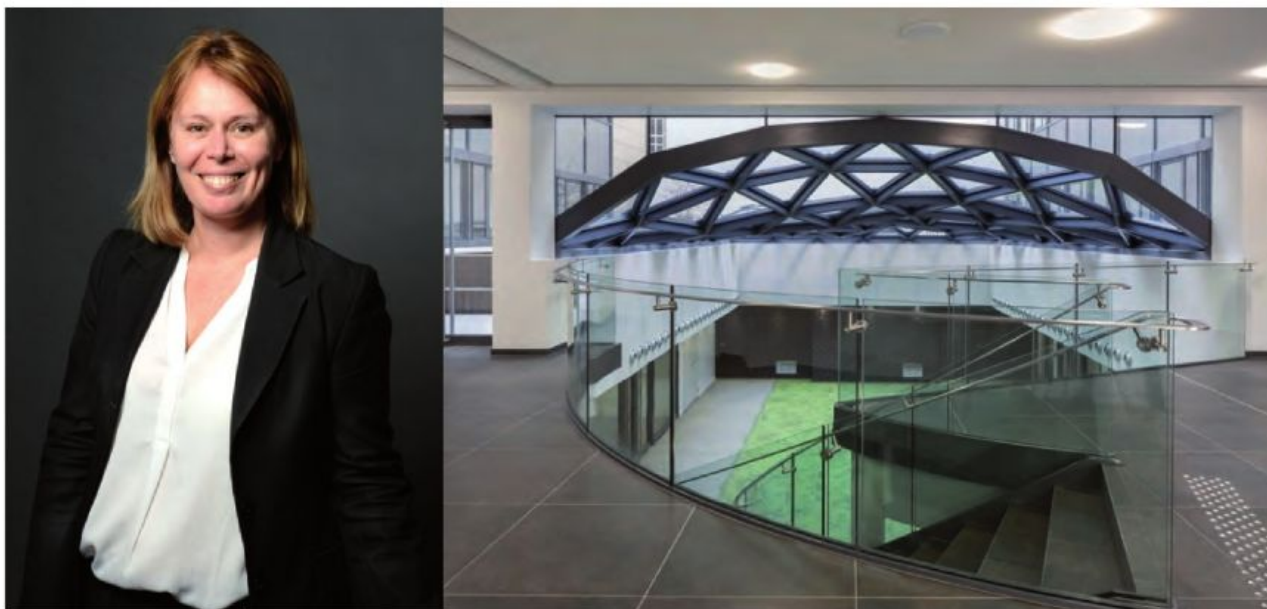
**What investment choices did CCR make in this tough environment?**

CCR maintained a conservative approach to its bond investments reinforcing its exposure in flexible bond funds better positioned to react to an increase in interest rates. In terms of credit risk, we gave preference to industrial and commercial businesses, as well as banking institutions, as opposed to supranational, sovereign and public issuers. We continued to actively diversify toward high-yield bonds and pursued our loan investments, although at a slower pace than in previous years for corporate loans, due to evolving market conditions. From a structural perspective, the deployment of an equity portfolio hedge enabled us to

improve the monitoring of the portfolio's volatility, which is based on the market expectations and the perception of risk.

**Is this conservative approach still valid?**

In general, we pay very strict attention to the level of risk in the asset portfolios. Significant volumes of flexible funds are allocated to the portfolios so as to reduce sensitivity toward large movements in the market that could occur in the event of a radical change in expectations. This strategy tends to reduce portfolio performance a bit, but it enables us to retain a stable level of risk regardless of the market's configuration.



**KARINE ROBIDOU,**  
Head of Real Estate

**In 2016, the real estate investment market continued to attract significant volumes of capital**

on both the domestic and international markets and in all asset classes. The decrease in bond yields and interest rates created a highly competitive environment as regards corporate real estate, while core-type products became scarce. Faced with a difficult capital investment environment, and in an effort to maintain a balanced and diversified portfolio, we pursued our dynamic and innovative real estate management strategy aimed at optimizing the risk/reward ratio by giving exclusive preference to secure assets. In this manner, CCR innovated in 2016 by initiating an exchange agreement with a well-respected real estate company listed on the stock exchange. 9,500 square meters of office space earmarked for restructuring was sold and the ensuing funds were immediately reinvested in a building to be used essentially for offices and prominent shops as well as a number of apartments.

The operation enabled CCR to withdraw a high-risk real estate asset from its portfolio and to diversify the asset through the acquisition of another asset located in a more attractive area in the center of Paris that is new to CCR. Simultaneously, the review of the asset portfolio prompted us to make immediate use of a number of available options. One of these options was to sold a core residential asset suffering from restructuring difficulties and of little rental value. This asset was sold in very good economic conditions. The funds were immediately reallocated to a real estate investment scheme consisting of a portfolio of core hotels located in France and Germany offering high yields and immediate financial returns. These operations enabled us to balance our directly owned real estate portfolio, 51% of which is comprised of residential assets and 49% of commercial assets. Our efforts were also rewarded through the creation of added value. In renovating our buildings, particular attention was paid to architectural design, environmental performance, present and future restructuring

possibilities and modern construction techniques.

Using this approach, we conducted a program for the total restructuring of our former 4,200-square-meter headquarters located in the heart of Paris' central business district.

The building, which received the «Breeam very good» label, was leased in its entirety on a long-term secure lease as soon as renovations were complete to a major co-working firm. CCR shall pursue its efforts to increase the allocation of its real estate portfolio and step up its restructuring operations while paying close attention to environmental protection.

In January 2016, CCR demonstrated its commitment in this area by signing a charter agreement for the energy efficiency of public and private commercially-owned buildings launched by France's Sustainable Building Plan (*Plan Bâtiment Durable*).



2016 figures  
in millions of euros

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**1,315**

Gross written premiums

**9,948**

Assets under management  
of which unrealized capital  
gains **1,095**

**89.90%**

Non-life combined ratio  
of which cost ratio **4.6%**

**1.90%**

Net return on assets

**295**

Income before tax

**141**

Net profit

**3,042**

Equalization reserves

**2,300**

Shareholder's equity  
after dividend

**AA**

(Stable outlook)  
Standard & Poor's

**A+**

(Stable outlook)  
A.M. Best

## PREMIUM INCOME BREAKDOWN

**66%**

Public reinsurance

**34%**

Open market reinsurance

**1%**

Exceptional risks

**8%**

Terrorism

**91%**

Natural disasters

**29%**

Life, accident  
and health

**24%**

Property

**20%**

Motor /  
Third-party liability

**6%**

Financial risk

**4%**

Engineering

**8%**

Marine/Aviation/Space

**3%**

Agricultural risks

**6%**

Other

## BREAKDOWN OF INVESTMENTS

**3%**

Deposits

**1%**

Protection

**66%**

Bonds and loans

**7%**

Real estate

**9%**

Money market instruments

**14%**

Stocks and diversified  
investments



# CCR

## PUBLIC REINSURER

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Historically its core business and general interest mission, public reinsurance comprises the heart of CCR's industry know-how. Thanks to its in-depth knowledge of risks based on several years of experience in the field, CCR's teams of experts provide clients and public authorities with the benefit of high quality analyses and forecasts.

**W**holly-owned by the French State, CCR conducts, with the State's guarantee, an essential mission: that of reinsurer of natural disaster risks (in the framework of the natural disaster compensation scheme specific to France), of terrorism risks and lastly of exceptional risks relating to the transportation of goods. In addition to providing long-term reinsurance solutions, CCR also provides temporary reinsurance solutions whenever the need arises. For example, CCR reinsured credit risk at the time of the 2008 financial crisis in order to hedge against market default that would have penalized small and medium size businesses. Additionally, as the State's risk manager, CCR collects vast amounts of data on extreme risks and insured property, using them to model these same risks and shares its knowledge with the public authorities and the market in order to more effectively mitigate risks. Lastly, CCR is also responsible for the accounting and financial management of public funds on behalf of the State.



# NATURAL DISASTER REINSURANCE: A ROBUST MODEL

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Natural disaster  
compensation  
scheme



1982 - 2016  
Natural disaster  
report

France is one of the very few European countries with a system that guarantees all its citizens, its businesses and its territorial municipalities satisfactory compensation, at affordable rates, in the event of material damage caused by a natural phenomenon.

**T**he law of July 13, 1982 established a specific compensation scheme in the form of a public-private partnership, to make up for the inadequate coverage of natural disasters, for which, until then, only very low levels of insurance were provided. In the framework of this statutory scheme, CCR is accredited to provide, upon the request of the insurer, unlimited reinsurance coverage against natural disasters arising in France. This public reinsurance coverage, which benefits from the State's guarantee, provides a guarantee of solvency to the scheme.

**20** euros is the average annual cost of coverage against natural disasters for a French homeowner

**90** million\* risks covered in France representing almost 1.6 billion euros in earned premiums

**14,000** billion euros\* in insured non-motor property

Approximately **200** billion euros\* in insured motor property

\*2014 figures

## PROVIDING RESILIENCE AND PROTECTION TO THE BENEFIT OF PUBLIC FINANCE

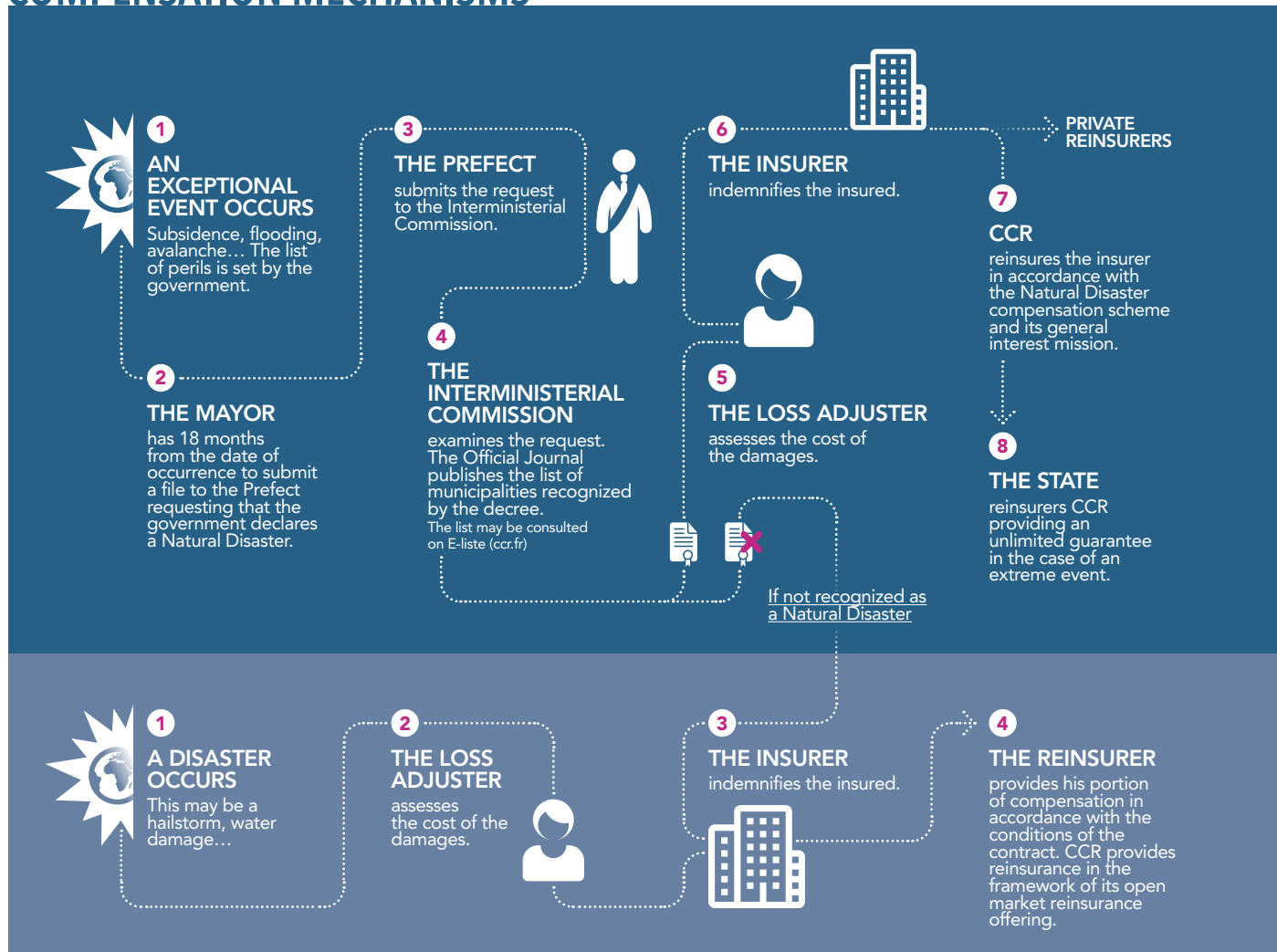
Since its inception in 1982, the natural disaster compensation scheme has enabled the State to meet the extreme costs of a large number of natural disasters. Each time an event occurs, the affected regions are able to rebuild again thanks to timely compensation that covers the major portion of damages to households and businesses. Because of the wise management of its reserves, today CCR can meet the demands of a single 5.6-billion-euro event without resorting to the use of State finances.

## AN ELEMENT OF NATIONAL SOLIDARITY

The natural disaster compensation scheme provides all French households, businesses and municipalities with access to insurance coverage against natural disasters at an affordable price regardless of the level of exposure to natural disaster risk. To achieve this goal, the scheme relies on the broad mutualization of risks in the form of a single premium set by the State. In this manner, each French household insurance policyholder pays an average 20 euros annually to be covered against natural disasters. The reinsurance provided by CCR, is mutualized across a number of insurance portfolios with highly variable exposure levels as this exposure is directly associated with the characteristics of the insured property and the geographic location.

# COMPENSATION MECHANISMS

■ Within the scope of the Natural Disaster compensation scheme  
■ Outside the scope of the Natural Disaster compensation scheme



CCR's reinsurance coverage is based upon the same principle as the underlying cover, that of national solidarity.

## DEVELOPING EXPERTISE THAT CONTRIBUTES TO RISK PREVENTION

With over 30 years' experience in Natural Disaster reinsurance, CCR has developed cutting-edge expertise in the area of natural hazards and highly detailed knowledge of the vulnerability of the territories. CCR works hand-in-hand with insurers, local municipalities and government authorities by assisting them in implementing risk prevention measures, protective measures against extreme natural events and also disaster awareness programs. CCR also manages the Barnier fund that provides the financing of these measures (see page 32).

## OUR EUROPEAN NEIGHBORS...

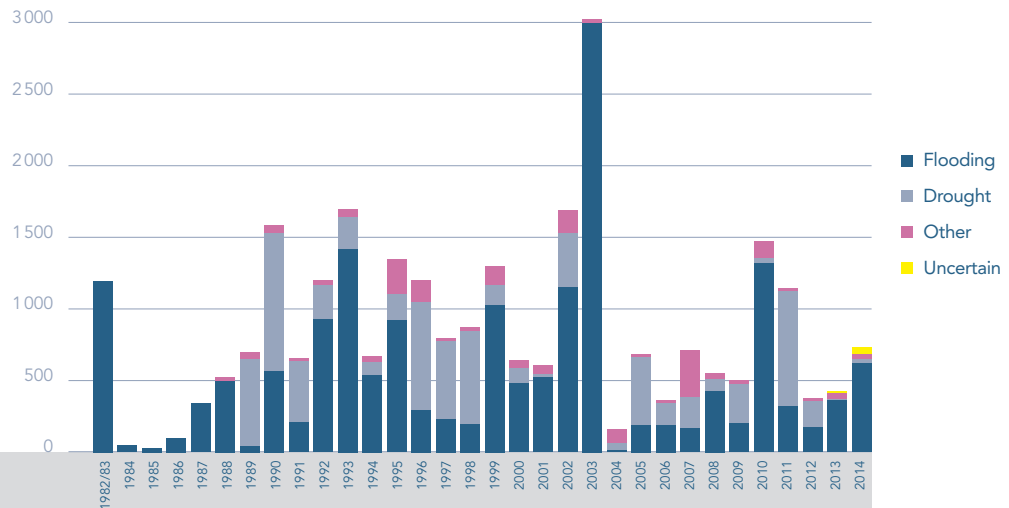
Only one third of the German population is insured against flooding.

Less than 10% of the Italian population is insured against earthquakes.

In 2016, the United Kingdom created Flood Re to provide compensation for flooding that occurs on British territory based on a model that also relies on solidarity between insureds.



## FOCUS



## LOSSES CHARGED TO THE NATURAL DISASTER COMPENSATION SCHEME

For the period from 1989 to 2014, 25 billion euros in compensation was paid through the natural disaster scheme. This represents an annual amount of approximately 1 billion euros which varies significantly from one year to the next. The years 2003 and 2016 recorded the highest losses due to the Rhone river flood and drought losses in

2003 and the floods of the intermediate Seine and Loire basins in 2016. Although these events were significant, they fell short of the projected scenarios including that of the Seine river flood of 1910, the insured cost of which to the natural disaster scheme could today reach between 10 and 20 billion euros depending on the scenario. Since the

inception of the natural disaster compensation scheme, the very large majority of municipalities in France have been recognized as natural disaster zones. Northern and southern France as well as the Atlantic coast are particularly prone to flooding while Ile-de-France and the western and southern portions are affected more by drought.

## FOCUS

## THE EFFECTS OF PREVENTION MEASURES ON LOSS EXPERIENCE IN FRANCE

In addition to providing natural disaster compensation, the natural disaster scheme also provides incentives to help finance prevention measures. A sliding scale for adjusting deductibles encourages the development of Risk Prevention Plans (RPPs).

A charge of 12% on natural disaster premiums is used to help finance the Major Natural Risk Prevention Fund (FPRNM). This fund is used to purchase real estate highly exposed to risk, to co-finance the Risk Prevention Plans and to develop measures that reduce vulnerability

to risk. Furthermore, for municipalities with an RPP or a Municipal Contingency Plan, the frequency of losses is significantly less than that of those without such plans.

# A DEDICATED TEAM WITH EXPERT KNOWLEDGE OF EXTREME RISKS

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Modeling  
the impact of  
climate change  
on insured  
property in the  
framework of  
the Natural  
Disaster

CCR's expertise in natural disaster reinsurance and more particularly in modeling natural events was once again strengthened during the year.

In 2016, CCR pursued the development of its models enabling the company to forecast and mitigate the consequences of the principal natural perils that occurred. Initiated in 2014, in partnership with the scientific teams of the French Geological Survey (BRGM), the modeling of the French mainland and ultramarine territory's exposure to earthquake events is now complete (for seismic risk causing residential and commercial insured damage). This research also enabled the teams to estimate the potential impact of major earthquakes on French territory in terms of insured damage.

## ANTICIPATING CLIMATE CHANGE

CCR, working conjointly with *Météo France*, also pursued the on-going development of a study on climate change. These efforts were based upon 400 years of historical climate data, 400 years of projected climate data beginning in 2050 according to an IPCC optimistic scenario, and 400 years of projected climate data beginning in 2050 according to an IPCC pessimistic scenario. The data, integrated and analyzed by the *Météo France* computing cluster for over 2 million hours, were fed into the CCR impact models enabling the company to assess the consequences of climate change in terms of insured damage and on the basis of the different types of possible scenarios. In 2017, further scenarios for damages

caused by flooding, drought and marine submersions are to be conducted.

The teams also developed a new simulation model for flooding, using a more precise digital terrain model, with a resolution of 25 m instead of 50 m, and new damage curves calibrated using the most recent loss events. Also, the models developed by CCR provided timely assessments of the damages caused by the floods of the Seine and Loire basins that occurred in May and June 2016.

## PREPARING FOR FUTURE CHALLENGES

Lastly, in 2016 CCR joined a European consortium financed by the Horizon 2020 program for research and innovation charged with the development of a project focused on an emerging issue: the *NAIAD* project. The aim of this three-year project is to assess the economic value of the natural environment with respect to weather risk prevention and to propose nature-based solutions so as to enhance the capacity to adapt to and prevent natural disasters. In France, two sites will be selected to study the impact of flash floods and drought on the natural environment.

**"Communicated  
the next days  
that followed the  
flooding of the Seine  
basin, the CCR's  
damage assessments  
were confirmed  
using the actual costs  
of damage received  
from insurers."**

# TERRORISM RISK: CONSOLIDATING EXISTING MECHANISMS

Faced with the evolving complexities of covering terrorism risk, CCR participates in industry discussions and provides its modeling expertise.

**A**ccredited since 1983 to cover property damage resulting from acts of terrorism using the State guarantee, CCR plays a leading role in on-going discussions on the development of insurance systems. As is the case with numerous other European governments, France, in the spirit of national solidarity, seeks to combine private and public resources to build its terrorism compensation system. The State therefore aims to strengthen the resilience of its citizens, its economic stakeholders and its institutions to terrorism risk.

## **BUILDING A SUSTAINABLE RESPONSE**

CCR participates, alongside the French Treasury Department and insurance-related professional organizations, in industry discussions on the topic of terrorism risk. Fully aware of market needs, it strives to build a balance financial architecture so as to provide a durable solution that meets State requirements. The State is also a stakeholder in a bodily injury compensation scheme, via a guaranty fund (the *FGTI*) that coexists with other contingency instruments. Regarding material

damage, CCR is accredited to provide public reinsurance for small and medium risks (sums insured of less than 20 million euros) upon the request of any insurer and for large risks (sums insured in excess of 20 million euros) through the *GAREAT* pool. This reinsurance mechanism therefore enables CCR to provide unlimited coverage of losses.

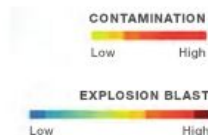
## **MODELING EMERGING RISKS**

Modeling stands out today as one of the tools necessary to fuel discussions and assess the potential impacts of emerging risks. In keeping with research begun as early as 2011, CCR strengthened its NBCR-scenario database in 2016. An NBCR scenario (Nuclear, Biological, Chemical or Radiological scenario) is one of the most feared forms of terrorism risk. The database now contains 120 scenarios with over 6,000 high resolution models (5 to 8 m).

The scenarios integrate key characteristics that affect the consequences of terrorist attacks such as wind speed and direction, rain, the quantity of explosive and the quantity of the NBCR substance.

**"The present geopolitical context requires the States to insure the security of its citizens and to provide compensation for potential damages."**





Terrorism risk in France: Existing coverage and CCR's role

The model also takes account of the 3D structure of the exposed buildings. In addition to predefined scenarios, "tailor-made" scenarios can be tested for the whole of the market or for a single cedent portfolio.

With this research and by contributing to on-going discussions on the topic of material and bodily damages, CCR actively participates in the development of a robust and resilient mechanism capable of delivering a solid and supportive response to acts of terrorism.

## "THE RISK IS HUMAN BUT ALSO ECONOMIC"

"The emergence of new forms of terrorism and the perspective of new types of risks combined with the acute development of genuine technical capabilities of new terrorist groups, such as cyber-terrorism or the development of chemical weapons, serve only to emphasize the necessity of involving both public and private stakeholders in the establishment of compensation mechanisms. The latest events occurring throughout the globe

demonstrate that there is a high level of human risk but also substantial indirect economic impacts such as business interruption, contingent business interruption, decontamination and clearance costs, as well as cyber-terrorism, to name a few.

Hence, for the terrorist attacks of November 2015 in Paris, the amount of compensation provided to the victims may reach 300 million euros\*. The indirect repercussions on

the country's economy with the forced inactivity of several areas of the capital, the drop in the activity of restaurants, a decline in the frequency of visitors to public places and fewer travelers are estimated to cost 2 billion euros\*\*."

\* *Le Monde* (in French), "Compensation, a form of recognition for the victims of November 13", electronic edition of January 23, 2016.

\*\* *Le Figaro* (in French), "The terrorist attacks may cost the French economy two billion euros" electronic edition of November 25, 2015.



**LAURENT MONTADOR**,  
Deputy Chief  
Executive Officer

# PUBLIC FUND MANAGEMENT: AN ADDED SOURCE OF EXPERTISE

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CCR is responsible for the accounting and financial management of five public funds on behalf of the State.



## **NATIONAL GUARANTY FUND FOR AGRICULTURAL DISASTERS**

The National Guaranty Fund for Agricultural Disasters (*Fonds National de Gestion des Risques en Agriculture - FNGRA*) replaced the National Agricultural Disaster Guarantee Fund (*Fonds national de garantie des calamités agricoles - FNGCA*) in 2010. In 2016, a number of large claims were settled by the FNGRA, including 101 million euros in compensation for damages sustained by farmers due to the drought that occurred in the summer of 2015.



## **COMPENSATION FUND FOR CONSTRUCTION INSURANCE RISKS**

The FCAC (*Fonds de compensation des risques de l'assurance de la construction*) pursued the financing of the development and expansion of energy renovation and efficiency efforts in the amount of 3.7 million euros. Related loss prevention objectives are hinged upon three programs: the action plan for construction quality and energy transition (*PACTE*), the digital transition plan for the building industry (*PTNB*) and the research and development plan aimed at lifting impediments to asbestos disposal (*PRDA*).



### MAJOR NATURAL RISK PREVENTION FUND

For the *FPRNM (Fonds de prévention des risques naturels majeurs)*, finances provided in respect to the prevention of natural disasters came to 178 million euros of which 63 million euros went to the action plan for flood prevention (*PAPF*), 31 million euros for the amicable acquisition of property exposed to natural risks severely threatening human life and 27.5 million euros for conformity studies for and the repair of public domain dikes.



### GUARANTEE FUND FOR RISKS LINKED TO SPREADING OF URBAN OR INDUSTRIAL WASTEWATER SLUDGE

The *FGRE (Fonds de garantie des risques liés à l'épandage agricole des boues d'épuration urbaines ou industrielles)* provides compensation for damages sustained by farmers and farm and forest land owners in the event that their land has been subject to urban or industrial wastewater sludge, and has become totally or partially unfit for farming.



### FUND FOR LOSSES ARISING FROM PREVENTIVE, DIAGNOSTIC AND HEALTHCARE SERVICES PROVIDED BY PRIVATE HEALTHCARE PROFESSIONALS

The *FAPDS (Fonds de garantie des dommages consécutifs à des Actes de Prévention, de Diagnostic ou de Soins dispensés par des professionnels de santé)* provides, in strictly controlled situations, full or partial payment of compensation for damages sustained by victims and ensuing from prevention, diagnostic or healthcare actions giving rise to the liability of a healthcare professional exercising his or her activity as a liberal professional and stipulated in article L.1142-1 of the French public health code.

### MODELING AGRICULTURAL WEATHER RISKS

Since 2013, CCR has consistently developed its expertise in the area of agricultural weather risk modeling. In 2016, the company finalized the first model for the assessment of insured losses. Based primarily on data for crop production and pricing obtained from the French Ministry of Agriculture, the model takes account of all crop production for France and of all weather perils. It provides a crop classification system based upon the level of vulnerability to the weather perils to which

the crops are exposed. The modeling of crop production and agricultural losses enables the integration of various insurance-related factors such as the insurance penetration rate, the triggering threshold for the related covers and the insurance deductibles. In parallel to this model, research is also conducted, in the framework of a thesis on economic damages, at a more detailed level, namely the agricultural parcel.



# CCR RE

## AN OPEN MARKET REINSURER

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For CCR, the creation at the outset of 2017 of CCR Re, a subsidiary specializing in open market reinsurance, marks the achievement of a strategic goal set as early as 2015 with a perspective to developing performance and transparency.

By legally separating its two historic activities, public reinsurance and open market reinsurance, CCR reached another important milestone in 2016, that of the birth of CCR Re on January 1, 2017. Having become a reinsurer “like the others”, with its own governance system and resources, CCR Re can now implement its own underwriting policy and investment strategy based on its risk appetite. With a more selective and geographically diversified portfolio, the new entity will develop durable and profitable business worldwide while continuing to benefit from public reinsurance and industry expertise in a wide range of areas.



# GUIDING PRINCIPLES OF THE SUBSIDIARIZATION

**"Our open market reinsurance commitments are both highly foreseeable and long-term. CCR Re will be able to adopt an autonomous investment policy in line with its activity."**

**BERTRAND LABILLOY,**  
Chairman and  
Chief Executive Officer



**A**nnounced at the beginning of 2016 by Pierre Blayau, Chairman of CCR, the subsidiarization of the Group's open market reinsurance segment constituted a project of considerable scope during the year that was accomplished in record time thanks to the concerted efforts of all the teams. The corporate name and visual identity chosen for the new entity, CCR Re, convey its affiliation with the Group, its autonomy and its experience. A fully integrated subsidiary, CCR Re will continue to enable CCR to benefit from its expertise in a wide range of risks enabling enhanced operation of its public reinsurance activities. Furthermore, backed by its own resources and governance system, CCR Re may now develop an autonomous strategy to meet the needs of its clients, in total financial transparency.

## AN ASSUMED CONTINUITY

The subsidiarization was performed in a manner that complies with the continuity of existing operations. Indeed, the array of risks covered in the life, non-life and specialty lines and the geographic scope for non-disaster risks (60 countries) remain unchanged. The volume of business, with targeted

**"Being a loyal business partner whose values include sustainability and stability, which have always been the values of CCR, CCR Re will grow through the experience it has acquired from CCR in the international arena over the past 70 years."**

**LAURENT MONTADOR,**  
Deputy Chief Executive Officer



The members of the CCR Board of Directors are (from left to right): Patrick Cerceau, Pierre Blayau, Bertrand Labilloy, Antoine Mantel, Charles Levi and John Conan (appointed since).

premium income for 2020 of between 400 and 450 million euros, is in line with the present premium income of CCR's open market segment taking into account the market cycle.

In terms of financial resources, the subsidiary has economic capital of over 750 million euros and a targeted solvency ratio of 200%, which provides it with the same level of financial strength as CCR. The underwriters, actuaries and underwriter assistants have not changed. Lastly, the underwriting discipline and focus on profitability as well as the control of volatility through rigorous underwriting and diversification have also been maintained.

#### **TRANSPARENCY AND RIGOR**

The effective communication of the project's development was an essential condition to its success. In the interest of transparency, CCR presented the project to its business partners and all its clients in September 2016, on the eve of the International Reinsurance Rendez-Vous in Monte Carlo. The project received a warm welcome and its solidity was further confirmed

by an agreement entered into with the French Prudential Control and Resolution Authority (ACPR) and the Brussels Commission. Lastly the legal, organizational, accounting and fiscal complexities also concern CCR's branch offices in Canada, Lebanon and Malaysia. The teams worked throughout the year in cooperation with the authorities for these international markets in order to meet their specific legislative and regulatory requirements and accomplish the creation of an operational entity on January 1, 2017.

The goal was successfully achieved as CCR's open market reinsurance activities were transferred to CCR Re on the announced date. The subsidiary therefore commenced its first year of operations on January 1 with the 2017 treaty renewals and with CCR's previous portfolio commitments.

The rigor with which the project was developed and its pertinence convinced the analysts at the outset: S&P Global Rating at long last announced in the wake of the creation of the new entity that it would issue CCR Re an A- rating with a stable outlook and AM Best assigned it an A rating with a stable outlook.

# PERFORMING THE OPERATION



**"The operation, which required that corporate, fiscal, labor and regulatory issues be addressed in France and abroad, was achieved within very short deadlines."**

**HERVÉ BARROIS,**  
Head of Legal Department  
– Secretary to the Board  
of Directors

**T**he subsidiarization of the open market reinsurance activity of *Caisse Centrale de Réassurance* (CCR) required the legal separation of our activities. Since January 1, 2017, CCR conducts exclusively public reinsurance operations with the guarantee of the State in France (notably the reinsurance of natural disaster risk, terrorism risk and exceptional risks relating to the transportation of goods) while CCR Re, a wholly-owned subsidiary of CCR, conducts all forms of traditional reinsurance business in the non-life, life, accident and health lines in France and internationally.

From a legal perspective, the subsidiarization was operated by way of a partial contribution of assets of the entire and autonomous open market reinsurance segment of CCR to the benefit of CCR Re. The operation touched on corporate, fiscal, labor and regulatory aspects, both in France and abroad. It appeared relatively cumbersome as,

despite the universal transfer of assets and the continuity of activity between CCR and CCR Re, it imposed most of the constraints associated with the creation of a new company (for example, that of obtaining the same licenses) to which one must add those relating to the transfer of the business (for example, the application of national and local regulations regarding portfolio transfers). It was also complex, due to the regulatory nature of reinsurance, the operation of branch offices and of a subsidiary abroad, not to speak of authorizations which, in principle, are of unlimited duration and must be obtained from the supervisory authority of the country of origin and also from the authorities of the countries where business is to be conducted.

Moreover, the project had to be achieved within short deadlines, namely over the course of 2016 (including, above all, a three-month period of consultation by the institutions' personnel



## CCR RE IMPLEMENTATION SCHEDULE

<b>12.15.2015</b> Mandate of the Board of Directors of CCR to study the separation of the open market reinsurance and the public reinsurance operations	<b>02.2016</b> Internal analysis (opportunities, feasibility, business plan)  Preliminary interviews: European Commission (Competition), Prudential Control and Resolution Authority (ACPR), Rating agencies	<b>03.2016</b> S&P preliminary rating  Agreement by CCR Board for personnel representatives and regulators to engage in consultation	<b>06.2016</b> Approval of the operation and business plan by the CCR and CCR Re Boards  Formal notification made to the European Commission (Competition)  Requests to regulators in France, Canada and Malaysia (licenses and transfer of the portfolio)		Appointment of CCR Re Chairman & CEO: B. Labilloy and of Deputy CEO: Laurent Montador  Appointment of Solvency II key functions
<b>09.01.2016</b> Approval of the contribution agreement by the CCR and CCR Re Boards  Signature of the contribution agreement by CCR and CCR Re	<b>10.17.2016</b> Approval of the contribution agreement and of the correlative capital increase by the CCR and CCR Re General Meetings	<b>From 09.2016 to 11.2016</b> License from the ACPR (Official Journal of 11.10.2016)  Solvency certificate from the ACPR enabling the transfer of the open market reinsurance portfolio  Licenses for Canada and Malaysia	<b>12.20.2016</b> Appointment of new CCR Re Board members: C. Levi and P. Cerceau added to the Board comprised of B. Labilloy (Chairman & CEO) and P. Blayau (CCR)	<b>12.23.2016</b> Formal recording of the partial contribution of assets  Date of effect of the contribution: 12.31.2016	

representatives before a decision to proceed) for reasons relating to corporate law and to regulations governing the conduct of reinsurance business.

We were able to simultaneously obtain a license for France, establish branch offices in Canada and Malaysia, and acquire licenses abroad through the competent authorities. CCR Re required all these authorizations in order to participate in the January 2017 renewals as well as to benefit from the transfer of the CCR reinsurance portfolio on January 1.

Likewise, we took the necessary regulatory steps for the transfer of the reinsurance portfolio from CCR to CCR Re within the framework of the partial contribution of assets. During this time, CCR implemented new provisions from the French insurance code relevant to reinsurance portfolio transfers that, it appears, had never

been previously applied. We also took similar steps in countries where CCR Re was establishing a branch office so as to be authorized to transfer the portfolio from the CCR branch to the CCR Re branch. In an effort to maintain the quality of relations with its clients, CCR ensured that all those involved were given the possibility of transferring their reinsurance contracts to CCR Re while being fully informed of all procedures and provided with explanations whenever the need arose.

The fulfillment in December 2016 of the last condition precedent of the transfer agreement confirmed the operation's definitive realization and the implementation of CCR Re which commenced operations with the 2017 treaty renewals and with CCR's portfolio in respect of prior-year business.

## 2016 Key figures

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# 70

years of experience  
in reinsurance

# 100 %

subsidiary of CCR

# 60

countries covered

# €810 m

in economic capital

# 75

direct employees

# 200 %

target solvency ratio

# A

(Stable outlook)  
AM Best

# A-

(Stable outlook)  
Standard & Poor's

# A TEAM OF EXPERTS WITHIN REACH AND ENSURING YOUR TRUST

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75 professionals at your side.

# CCR

## A CORPORATE CITIZEN

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A responsible and committed company, CCR places environmental and societal issues at the core of its initiatives and policies.



**B**acked by its industry expertise and squarely focused on risk forecasting and prevention, CCR naturally takes into account the social, societal and environmental impacts of its activities. The Group considers that its primary responsibility as an employer is to foster the professional development of its employees and to facilitate the professionalization of young talent. However, it also remains fully aware of the expectations of its stakeholders and the difficulties encountered by French society. Since 1996, CCR has been committed to sponsoring humanitarian actions, bringing its financial support to a range of associations and organizations each year. For over close to 20 years, the Group and its employees have provided support to some 36 associations on the ground. Moreover, through its sponsorship initiatives, CCR also works to facilitate access to cultural heritage for the general public, its employees and its clients. Lastly, its long-time commitment to environmental protection makes CCR a pioneer company in areas such as waste management and recycling.



# FOSTERING MOBILITY AND ATTRACTING YOUNG TALENT

The Group Human Resources Department accompanies employees and managers on a daily basis in all the HR-related aspects associated with their respective positions.

The human resources development and career management team at CCR manages an enhanced career management system serving employees and the company. Internal mobility is an indispensable factor. Aimed at consistently ensuring the ideal match between jobs and operational skills, internal mobility provides a highly efficient contribution to talent development.

## TRANSPARENT AND SHARED MOBILITY GUIDELINES

In an effort to maintain the equal treatment of employees and to empower them in the development of their mobility opportunities, a charter was drafted and published in 2015. With the support of their immediate supervisor and the HR team, employees play a key role in their personal mobility. In order to enable each employee

to establish a medium-term plan, a mapping was developed in 2015 listing 32 professions within the company as well as the prerequisites required to access several levels of career development, traditional, intuitive or innovative. A personalized accompaniment program was created to ensure success when changing from one job to another.

## RECRUITING FOR TOMORROW

The CCR Group must also plan for the future and attract the best possible expertise for the years to come. Working in cooperation with almost ten different schools, it provides support to students through a professional insertion initiative entitled "*Jeunes talents*" that proposes learning, work-study and training contracts. Fully integrated into the company, these young employees are empowered with the responsibility of fulfilling genuine added-value missions. These "win/win" contracts create a pool of possible recruits for CCR. In 2016, one third of the students who completed a work-study contract were recruited into the company on the



basis of a permanent employment contract. With branch offices in Lebanon and Canada, CCR also offers opportunities through the VIE international volunteer program especially in underwriting, which resultantly represents a pool for recruiting young talent in response to company needs. In a company characterized by its cutting-edge expertise and by a corporate culture forged for over 70 years, employee integration is a key factor. In 2017, every newly arriving employee will receive the attention they need, thanks to new orientation and insertion processes.



# 271

employees

# 32

professions

# 10%

of employees  
under the age of 30



On the occasion of a forum organized by the University of Paris' Institute of Statistics (ISUP) on December 1, 2016, CCR employees were given the opportunity to promote the reputation of their actuarial work and meet with work-study applicants.



# CULTURAL AND SOCIAL SPONSORSHIP

Since 1996, CCR has been committed to sponsoring humanitarian actions, bringing its financial support to a range of associations each year as well as to a cultural sponsorship organization since 2016.

## MUSÉE

### DU QUAI BRANLY <sup>(1)</sup>

After providing its support to the Orsay and *Orangerie* museums in 2016, CCR entered into a sponsorship agreement in 2017 with the *Musée du Quai Branly Jacques Chirac* for the "*Picasso Primitif*" exhibit.

### RÊVES DE GOSSE <sup>(2)</sup>

offers children aerial baptisms helping them to accept the differences between "extraordinary" children (suffering from disease or handicapped) and "ordinary" children.

### NEGAR <sup>(3)</sup>

works to foster recognition of Afghan women's rights and supports, above all, the education of young women in the northern part of the country.

### TEO 2004 <sup>(4)</sup>

finances and performs neurosurgical operations for children from impoverished countries where there is no access to such treatment.

## AREGE <sup>(5)</sup>

supports development activities (well-water drilling, urban lighting) in an underprivileged neighborhood of Douala, Cameroon, the *Gentil* quarter.

## PROCLADE <sup>(6)</sup>

works toward justice, peace and the eradication of poverty as well as the welfare of persons living in the most deprived areas of the planet.

## FORM'ACCUEIL <sup>(7)</sup>

works to facilitate the integration of immigrant workers by proposing French literacy and language courses.

## POINT VERT <sup>(8)</sup>

offers vacations, short stays, welcoming facilities and services for the handicapped.

## AHVEC

The humanitarian association of European and Cameroonian ambitions (*Association Axe Humanaire des Volontés Européennes et Camerounaises*) has founded a center for the orientation and training of abandoned children in Baleveng, Cameroon.







# RECYCLING, TAKING ACTION FOR THE ENVIRONMENT

Being a reinsurer, means being responsible. CCR honors this commitment on a daily basis, above all through the effective management of the waste produced by its headquarters.

**T**he business of reinsurance requires that we anticipate the future in order to make the world more secure for further generations. After adopting an eco-responsible approach over 25 years ago, CCR has now developed a waste collection system based on selective sorting and recycling with the ambitious goal of zero waste disposal.

## PARTNERS OF CHOICE

To achieve this goal, the Group selects its suppliers on the basis of the genuine and measurable level of their involvement in environmental protection and works in close cooperation with them to reduce its carbon footprint. Among these partners, the firm of Privacia, specializing in paper destruction and which has collected CCR's waste since 2011, is certified both Iso 9001 and Iso 14001.

Privacia delivers its shredded paper to authorized waste management companies that recycle the paper in compliance with the latest standards.

## SELECTIVE SORTING IN THE WORKPLACE

CCR devotes considerable attention to recycling all waste that can be recycled: from paper to water bottles, to light bulbs, pens, batteries, ink cartridges and used office furniture. In some departments, employees collect and recycle coffee capsules. In addition, the floors of CCR's headquarters are lined with carpeting made from recycled fishing nets. The Group took an important step in 2016 by opting to introduce sorting boxes at its offices provided by the firm of "Les Joyeux Recycleurs". For each kilogram of collected waste, 5 euro cents are given to "Ares Atelier", a not-for-profit association whose purpose is to develop social and professional insertion possibilities for persons experiencing severe social exclusion.

**"CCR selects its suppliers on the basis of the genuine and measurable level of their involvement in environmental protection."**





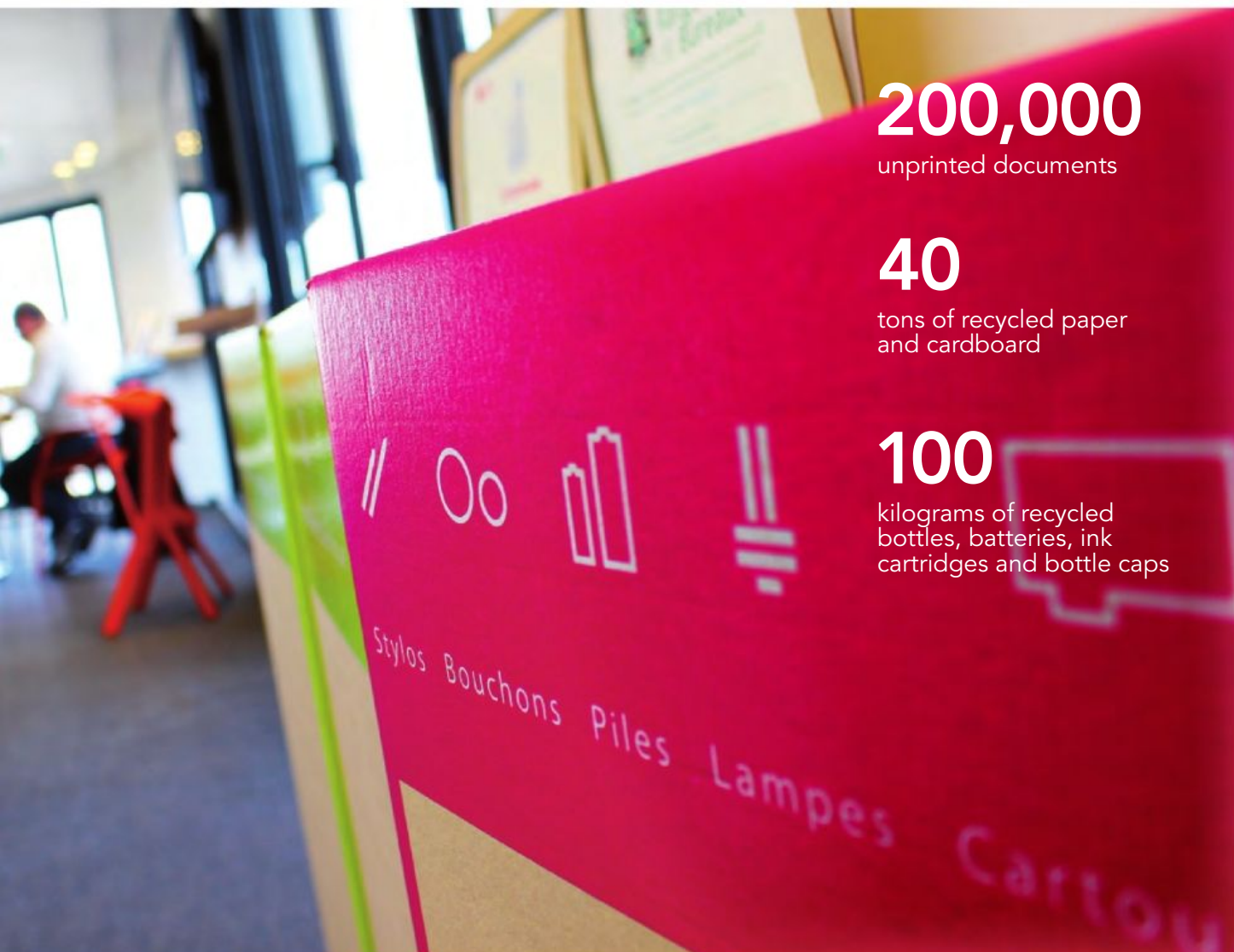


## RESPONSIBLE BUILDING PRINCIPLES FOR A COMMITTED COMPANY

CCR's headquarters, at 157 bd Haussmann in Paris, is also an expression of the Group's commitment to sustainable development. Entirely restructured in 2015, the building obtained a high energy performance label and is compliant with France's low consumption

building (BBC) and *Effinergie* energy-efficiency standards. All decisions were made in the light of sustainable and responsible building principles: materials (carpeting made from recycled fishing nets), a green wall of over 150 square meters composed of locally-

grown non-allergenic plants, use of large windows to increase the amount of natural light, and the installation of systems that reduce the consumption of water and electricity.



**200,000**

unprinted documents

**40**

tons of recycled paper and cardboard

**100**

kilograms of recycled bottles, batteries, ink cartridges and bottle caps

# GOVERNANCE AND FINANCIAL RESULTS

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Thanks to the balance of its portfolio, CCR, operating in a difficult global market, increased its premium income in 2016. The Group, which succeeded in subsidiarizing its open market reinsurance activity, confirmed the solidity of its business model and the pertinence of its corporate strategy. It is now poised to meet the challenges of the future with confidence.



# SETTING STRATEGIC ORIENTATIONS

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## BOARD OF DIRECTORS

The Board of Directors sets CCR's strategic orientations and ensures their implementation. Above and beyond its traditional responsibilities, the board performs its duties in compliance with the Solvency II directive and the associated regulations.

The CCR Board of Directors is comprised of 15 members of which one representative of the State appointed by ministerial order, 9 directors appointed by the General Meeting of the shareholders (of which 3 proposed by the State) and 5 employee representatives elected by fellow employees. The Board of Directors decided to maintain the disassociation of the positions of Chairman of the Board and Chief Executive Officer. Mr. Pierre Blayau has been Chairman of the Board of Directors since January 14, 2015.

Mr. Pierre Blayau was appointed Chairman of the Board of Directors for a duration of 5 years by the Board of Directors on the date of July 2, 2015. Mr. Bertrand Labilloy has been Chief Executive Officer since January 16, 2015. M. Bertrand Labilloy was appointed Chief Executive Officer by decree of the President of the French Republic on August 17, 2015 upon the recommendation of the Board of Directors.

The Board of Directors comprises four committees from amongst its members:

- the Accounts committee, presided by Mr. Patrice Forget,
- the Audit and risk committee, presided by Mr. Gérard Lancner,
- the Compensation, appointment and governance committee, presided by Mr. Patrick Lucas
- and the Strategy committee, presided by the Chairman of the Board Mr. Pierre Blayau.

These committees prepare the work of the Board relating to topics submitted for their examination and report their conclusions to the Board.



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**PIERRE BLAYAU** (1)

**DAMIEN ANDRIES** (2)

**CLÉMENT BOISNAUD** (3)

**SYLVIE CHANH** (4)

**JOHN CONAN** \* (5)

**PATRICE FORGET** (6)

**THOMAS GROH** (7)

**GÉRARD LANCNER** (8)

**PAULINE LECLERC-GLORIEUX** (9)

**PATRICK LUCAS** (10)

**DELPHINE MAISONNEUVE** (11)

**ANTOINE MANTEL** (12)

**DAVID MONCOULON** (13)

**MARC MORTUREUX** (14)

**MARIE-CLAUDE POUDEL** \*\* (15)

\* Replaced by Didier Suard  
with effect from January 1, 2017

\*\* Replaced by Sylvie Legendre  
with effect from January 1, 2017

# IMPLEMENTING CORPORATE STRATEGY

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## EXECUTIVE COMMITTEE

The CCR Executive committee, comprised of 13 permanent members, is responsible for the operational and organizational decision-making required by the implementation of corporate strategy. Working within this framework, it ensures that corporate objectives are effectively communicated to operational management.

The Information and coordination committee has been broadened to include fifteen corporate managers each representing an operational division within the company, namely public reinsurance, open market reinsurance, finance, and the support functions. The committee enables information exchange and discussion on issues such as strategy, operations and the general management of the company. It also handles questions involving coordination of operations between the departments.





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**BERTRAND LABILLOY** (1)  
CHIEF EXECUTIVE OFFICER

**LAURENT MONTADOR** (2)  
DEPUTY CHIEF EXECUTIVE  
OFFICER

**HERVÉ BARROIS** (3)  
HEAD OF LEGAL DEPARTMENT  
– SECRETARY TO THE BOARD OF  
DIRECTORS

**PATRICK BIDAN** (4)  
CHIEF UNDERWRITING  
OFFICER - PUBLIC REINSURANCE



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AND GUARANTY FUNDS

**CHRYSTELLE BUSQUE** (5)  
CHIEF FINANCIAL OFFICER

**XAVIER CHANET** (6)  
CHIEF INFORMATION OFFICER

**MARLÈNE LARSSONNEUR** (7)  
HEAD OF HUMAN RESOURCES

**PIERRE COUMES** (8)  
HEAD OF FINANCIAL INVESTMENTS

**PATRICK DELALLEAU** (9)  
CUO GLOBAL

**JÉRÔME ISENBART** (10)



11

CHIEF RISK OFFICER

**HERVÉ NESSI** (11)  
CUO MARKETS

**ANTOINE QUANTIN** (12)  
DEPUTY CHIEF UNDERWRITING  
OFFICER - PUBLIC REINSURANCE  
AND GUARANTY FUNDS

**KARINE ROBIDOU** (13)  
HEAD OF REAL ESTATE



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# CONSOLIDATED FINANCIAL STATEMENTS

AT DECEMBER 31, 2016

## CONSOLIDATED INCOME STATEMENT

In thousands of euros		12/31/2016		12/31/2015
	Non-life reinsurance	Life reinsurance	Total	Total
Premium income	1 190 460	124 705	1 315 165	1 287 242
Change in unearned premiums	-22 785	-6 178	-28 963	17 948
<b>Earned premiums</b>	<b>1 167 675</b>	<b>118 527</b>	<b>1 286 202</b>	<b>1 305 190</b>
Other operating income	3 569	0	3 569	3 173
Financial income net of expenses	122 005	4 424	126 429	132 242
<b>Current operating income</b>	<b>125 574</b>	<b>4 424</b>	<b>129 998</b>	<b>135 415</b>
Reinsurance benefits and claims	-863 995	-87 787	-951 782	-817 433
Expenses or income net of reinsurance cessions	-18 116	-3 426	-21 542	-33 855
Management expenses	-174 222	-20 459	-194 681	-198 612
<b>Current operating expenses</b>	<b>-1 056 337</b>	<b>-111 672</b>	<b>-1 168 009</b>	<b>-1 049 904</b>
<b>Current operating income</b>	<b>236 912</b>	<b>11 279</b>	<b>248 191</b>	<b>390 701</b>
Other income and expenses			47 545	42 457
Extraordinary items			164	-3 515
Employee profit sharing			-534	-1 402
Income tax			-154 860	-209 930
<b>Consolidated net income</b>			<b>140 506</b>	<b>218 311</b>
Earnings per share (in euros)			46,84	72,77
Diluted earnings per share (in euros)			46,84	72,77

## CONSOLIDATED BALANCE SHEET OF ASSETS

In thousands of euros	12/31/2016	12/31/2015
<b>Intangible assets</b>	<b>4 078</b>	<b>4 629</b>
<b>Investments in reinsurance companies</b>	<b>8 350 057</b>	<b>8 295 993</b>
	307 311	299 560
Investments in subsidiaries and participating interests	6 200	6 200
Other financial investments	7 907 068	7 861 781
Funds held by ceding companies	129 478	128 452
<b>Reinsurers' and retrocessionaires' share of technical reserves</b>	<b>18 137</b>	<b>12 968</b>
<b>Other receivables</b>	<b>114 204</b>	<b>81 747</b>
<b>Other assets</b>	<b>538 317</b>	<b>528 113</b>
Fixed assets	3 208	3 362
Other	535 109	524 751
<b>Accruals</b>	<b>511 197</b>	<b>433 992</b>
Deferred acquisition costs	33 491	35 010
Deferred tax assets	181 462	171 601
Other	296 244	227 381
<b>Total assets</b>	<b>9 535 990</b>	<b>9 357 442</b>



## CONSOLIDATED BALANCE SHEET OF LIABILITIES

In thousands of euros	12/31/2016	12/31/2015
Share capital	60 000	60 000
Additional paid in capital	-	-
Consolidated reserves	2 199 475	2 081 164
Group net income	140 506	218 311
<b>Shareholder's equity</b>	<b>2 399 981</b>	<b>2 359 475</b>
Life technical reserves	262 148	238 665
Non-life technical reserves	6 742 993	6 614 298
<b>Gross technical reserves</b>	<b>7 005 141</b>	<b>6 852 963</b>
<b>Contingency reserves</b>	<b>28 617</b>	<b>26 626</b>
<b>Other liabilities</b>	<b>46 810</b>	<b>64 062</b>
<b>Accruals</b>	<b>55 440</b>	<b>54 315</b>
<b>Total liabilities</b>	<b>9 535 990</b>	<b>9 357 442</b>

## FOR MORE ABOUT CCR

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More info at [www.ccr.fr](http://www.ccr.fr)

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de Réassurance



CCR Reassurance



CCR Reassurance



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