85 people from all walks of life, of all races. They wear the same colours, working together to unfurl a tarmac ribbon around the earth; they cover it with lines that were imaginary yesterday... today they are real. The roads are built by people for people. By a few, to be enjoyed by all.

Raphaël de Mercey lives and works in Paris. He illustrated the latest album by artist Jean-Louis Murat, "Le Moujik et sa femme". His works have been exhibited in the following places:

- 2000: Le Pend'Art, Paris
- 1997: Le Zoo, Paris

Raphaël de Mercey

DIRECTIONS
The many faces of Colas Indian Ocean
Colas holds firm

Our core business remains and will always remain, roads. We are the market leader and must maintain our position. We shall continue to expand our scope; our territories are only limited by the planet itself. This is our intention at Colas and we must hold firm whatever difficulties we may encounter.

Business and profits plateaued in 2002. This voluntary stabilisation was a result of the need to control the Group’s growth over the past few years and to unite all the new companies under the aegis of the Group’s corporate values.

As 2003 dawned, two new sources of concern have come to light, in addition to those resulting from the international situation and the world economy.

The first concern arose when the French government scrapped the road innovation partnership policy that it had supported for about twenty years. This was the result of public contract reform. This renouncement, which is a blow to French roads, is a great challenge for Colas, because we have always relied on the foundation of French highway techniques.

The other subject of concern is Africa, a continent to which the Group is deeply attached, but which is increasingly suffering from recurrent problems.

With respect to the economic uncertainties created mainly by the Iraqi crisis, the price of oil and budget deficits, we should be able to weather these storms since we are firmly established in France, North America, Central and Western Europe, the Indian Ocean and Asia.

In 2003, the Group should once again post a low level of growth, maintain the level of recruitments and investments, and resume external growth as we announced at the end of 2001.

In the middle of the tumults that are rocking the world, Colas is holding firm and moving forward.
LATITUDE/LONGITUDE
Burkina Faso, Ireland, Denmark, Lebanon, France… a slide show of the Colas Group’s latest projects and accomplishments worldwide.

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DIRECTIONS
Drivers
• Road safety, innovations, birthdays, congresses, trade fairs, acquisitions… Six months of the Group’s activities.

In depth
• The many faces of Colas Indian Ocean.

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EN ROUTE
France
A big project: runway 2 at Roissy Airport

“An exceptional project”, one that mobilised three of the Group’s subsidiaries.

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ITINERARIES
They are all passionate about their jobs. Read about their daily lives and their projects within the Group. Portraits.

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INTERSECTIONS
• Michel Démarre: further developing Public Private Partnerships (PPPs).
• Ann Hindry: the relationship between art and the company.

France
A big project: runway 2 at Roissy Airport

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France
Site supervisor: conductor and one-man band

“An exceptional project”, one that mobilised three of the Group’s subsidiaries.

Benin
The road to Atakora: when a dream takes shape...

Presentation of a key player.

This road will open up Atakora, in northwestern Benin.
Burkina Faso, Ireland, Denmark, Lebanon, France ... a slide show of the Group’s latest projects and accomplishments worldwide.

In December 2001, the New Projects division of Colas Bâtiment began work, building an office block for the EADS consortium on the banks of the river Seine, in Suresnes. The construction, carried out with CBC, is an impressive one: 46,000 sq.m. of floors, 5 office levels with planted balconies, 12,800 cu.m. of concrete to be cast, 3,500 sq.m. of glass walls, the list could go on. It is also a project that has some special characteristics, since the base-ments are 14 m beneath the level of the Seine. The five-level underground parking lots, with a total capacity for 800 vehicles, have been cleverly designed to avoid flooding. Furthermore, on the first level, the equipment room will be waterproofed by crystallising the concrete walls. The teams working on this project have had to come up with very ingenious ideas to ensure success. For example, during the building of the basements, it was necessary to ensure that the tie-beams supporting an old wall were resistant enough. The workers were able to follow the behaviour of the wall regularly by using a wall-sounding system. Likewise, when the time comes to install the glass elements, the team will show its inventiveness once again, by using a system that acts like a sucker. As supervisor Pascal Godon says himself: “This project is really an extraordinary one!” Delivery is scheduled for June 2003.

The road to development

The project to build 717 kilometres of unpaved roads that began a few months ago in Burkina Faso will end the isolation of many villages throughout the country. “The road to development is through the development of roads…” This historic sentence was pronounced by Mr Lingani, Burkina Faso’s Minister of Infrastructure, Housing and Town Planning during the inauguration of the projects. On that day, the Minister boldly and without hesitation drove a Colas grader to mark the official beginning of the road construction works. The 717 km of unpaved roads that are being refurbished and upgraded in the eastern and southern regions of the country, about 200 km from Ouagadougou and Bobo-Dioulasso, are divided into three sections. All in all, this represents 3.5 million cubic metres of earthwork and 15,000 cubic metres of concrete, for a total amount of 26 million euros. Work began in May 2002 and should be completed in May 2004. Over this two-year period, nearly 600 people will have participated in this project. 75% of them consist of local labour, hired in collaboration with village chiefs. About fifteen expatriate staff have been mobilised to work in the country. To get as much work done as possible before the rainy season, the workers have been working at a brisk pace during the dry season: six days a week and ten hours a day. Because the desire to protect the environment as much as possible is an ever-present concern on this project, Colas is working in close collaboration with the state forest management authorities.

EADS: an unusual building project

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The Toulon tunnel lights up

In Toulon, the light is at the end of the tunnel and also all the way through the tunnel! The impressive Toulon tunnel project was recently completed with the laying, by Colas Midi-Méditerranée, of white Colclair surfacing. The light colour of this luminous hot mix makes it possible to combine safety and comfort and also saves on energy. The Toulon tunnel is a gigantic structure that took over ten years to build. This 3.2-km urban tunnel is the second of its kind in France and is also the longest tunnel in the world surfaced with Colclair. White Colclair was chosen as the surface course of the tunnel because of its many advantages. “The whiteness of this mix is a guarantee of safety because it offers a contrast that makes it easier to spot obstacles, which are dark in 95% of cases,” explains Pierre Pringuet, Technical Manager of Colas Midi-Méditerranée. “The lightness of the tunnel also reduces stress and increases the driver’s comfort. Lastly, the use of Colclair also results in a 30% saving on energy because of the reduced lighting.”

Colclair is obtained by mixing a translucent synthetic binder (Colclair P2) with white sand, light beige aggregates and a mineral pigment (titanium oxide). The 1,500 metric tons of Colclair needed for this project were manufactured in the Gignac plant, near Marseilles, which is specially equipped for manufacturing this type of asphalt mix. Fifteen semi-trailer trucks had to be mobilised to transport the mix which it took two days to lay. The tunnel, which was commissioned on September 19 2002, connects the A57 motorway from Nice to the A50 motorway to Marseilles, and it will definitely relieve congestion in the centre of Toulon.

Scintiflex goes to Lebanon

Things are changing under the Lebanese sun. Since December 2001, 3 stretches of road in this country of light have been sparkling thanks to Scintiflex. This has delighted the Lebanese, who have always complained that their roads were dark, dull and gloomy. Patented by Screg in 1997, Scintiflex surfacing contains recycled glass from mirrors. It does not only bring a sparkle to roads, it also provides a solution to safety problems. The Lebanese authorities were won over by this sparkling asphalt mix that had been used in demonstration projects throughout the country. “Scintiflex is an original process which is often used in France, for example, to set off prestigious coastal roads (in Biarritz), to make roads more visible (in Saint-Quentin-en-Yvelines as part of the renovation of the theatre square in Montigny-le-Bretonneux), to attract customers to supermarkets (in Gif-sur-Yvette), or to mark out tramway circuits (Bordeaux). Scintiflex is also enjoying an increasing success in other countries: in the UK, Switzerland and now in Lebanon,” explains Pierre Bense, a manager at the Central Research Laboratory in Magny-les-Hameaux.

In Lebanon, Scintiflex was laid on two bends of a mountain road, as well as in the two tunnels of North Beirut, which are congested 20 hours a day by a daily traffic of 150,000 vehicles. The main concern on these sites was road safety. The Lebanese Road Authority wanted to produce an efficient warning effect for motorists, encouraging them to reduce their speed. The Lebanese Minister for Public Works and Transport has congratulated Colas for its “brilliant” asphalt mix, and also underlined the fact that the company was one of the best in Lebanon.
Ensuring the continuity of Irish thoroughbreds ...

The bypass being built in the small Irish village of Kildare (5,000 inhabitants), 30 km southwest of Dublin, has a peculiar feature: it is built in a trench. This 13-km beltway passes very close to the national stud farm, where Irish thoroughbreds are raised, and in front of one of the country’s most reputed racecourses. It was therefore essential to avoid all traffic-related noise pollution and at all costs protect the tranquillity of the horses. How could this thorny problem be solved? The answer was to bury the road by 5 to 10 metres so that the slope would form a natural noise wall. However, there was an obstacle to this highly ingenious solution: the road dipped 4.5 metres into the underground water table over a 3.5-kilometre section. This led to the idea proposed by Colas Teoranta, the Irish subsidiary of Colas, which consisted in laying a 4.8 mm-thick layer of Coletanche NTP3, a bituminous geo-textile membrane, to prevent the flooding of the site as well as the pollution of the water table while protecting the circulation of ground water. The project owner and the prime contractor both found the idea very appealing, mainly because of Coletanche’s technical qualities: its density and welding techniques are perfectly suited to a windy and wet country. The laying of the geo-textile membrane began in October 2001 and should be completed in 2003. The Kildare bypass is scheduled to open in 2004. Work on the project comes to a halt from November to the end of March because of the weather conditions. As for the construction of a road in an underground water table, it is a tremendous feat! It was carried out in 500-metre sections and required the setting up of a system of wells and pumps to lower the water level. With 240,000 sq. m. of membrane laid, this project is the largest Coletanche-laying project ever carried out. It is also a wonderful example of the possibility of reconciling two imperatives: road building and the protection of sensitive sites.

Green avenue in Normandy

Dieppedalle Cany, part of Colas Ile-de-France-Normandie, is building a multipurpose hiking trail from Dieppe to Forges-les-Eaux, for the Seine-Maritime department.

It is a “green avenue” created over a disused railway line for the use of all nature enthusiasts.

Construction of the first section (40 km long and 6-7 m wide), between Saint-Aubin-le-Cauf and Beaubec-la-Rosière, began in April 2002 and finished in September 2002. The surfacing will be laid in Spring 2003, at the same time as the second section (4.2 km between Offranville and Hautot-sur-Mer).

This contract, worth nearly 2.5 million euros, is made up of many operations: dismounting of the railway lines, enhancement of ballast, crushing, laying of a surface course in Reccol and in chamois-coloured Colmat, planting of grass and development of crossroads. On the platform, every possible measure has been taken to protect the rare plantlife and wildlife.

The Pont de Pierre

under tight surveillance

The Bordeaux tramway will cross the Pont de Pierre. This bridge, built under Napoleon 1st, has received a lot of attention from Colas Sud-Ouest, the representative of a group of companies in charge of three nearby projects. They have already built 1.6 km of platforms and roads. “When this project began 2 years ago, people thought that the bridge wouldn’t bear the works and would collapse,” recalls Gilles Saugnac, Project Manager at Florac. After seeking expert advice, they reinforced the pier structure and began work.

“When we bid,” explains Mr. Saugnac, “we didn’t know the state of the deck. Luckily, it was in good condition and we could start work.” This concerned the infrastructure and water-proofing of the bridge over 500 m and the stripping of the bridge itself. It involved 10,000 sq. m. of demolition, the laying of 1,500 metric tons of high modulus hot mixes, 700 cu. m. of concrete and 65 metric tons of structural steel for the tramway platform. There were also 1,500 m of granite curbs, 300 cu. metres of concrete for sidewalks and 3,000 sq. m. of mastic asphalt. “Our worry wasn’t the weight, it was the vibrations, which we had to avoid at all costs,” explains Gilles Saugnac. “For compaction, we used P5 rollers because they were more appropriate than P3 rollers.”
Suburbaine Port-de-Bouc, a division of Spac, recently laid a pipeline on difficult terrain, in the region of Lavéra. The pipeline passes near the saltwater lake ‘Etang de Berre’, not far from Marseilles. This was a very tricky operation because of the natural constraints and limitations of the landscape. This demanding project was launched at the beginning of Spring 2002 and was successfully completed in July 2002. The 1.8 million euro contract was carried out for Geosel, as part of a joint venture with Spie. The laying of the steel pipeline (500 m in diameter and 5-km long) alongside the old pipes, necessitated a great deal of energy and careful planning. The very uneven terrain and its location in this very rocky region explain why the teams encountered so many difficulties during the trench-digging phase. They had to use a rock trenching machine. It was also no easy task bringing the tubes and storing them on this site, which was extremely difficult to access. Another problem was the dryness of the region’s terrain. To avoid all risks of fire, the welding works had to be carried out during the wettest periods and this sometimes resulted in interruptions. The Lavéra project was executed under difficult conditions, but all those who participated left the site with great job satisfaction ... and good memories!

Jutland motorway being completed
Colas-Noveja, a Danish subsidiary of Colas, has won the 10.8 million euro contract to build the last section (5.6 km) of the Jutland motorway, which was begun thirty-five years ago, and which crosses the Danish peninsula from north to south. This is a veritable challenge because of the harsh climatic conditions and the heavy traffic that continued throughout the works. The project plans to “transform” the two-lane highway that links Hjorring to Hirtshals into a 4-lane motorway. The two existing lanes will be renovated and two additional lanes will be created. Draining work will have to be carried out and a bridge and two houses located on the alignment will have to be destroyed. The specialised subsidiary Norvin & Larsen will be building two new concrete bridges. Three passages have been planned to allow toads, foxes and deer to cross the road along with aquatic structures for fish.

Work on the project began in May last year. It is jointly managed by Borge Larsen, who has 15 years experience, and Niels Ottesen, who has been with the company for 25 years now. The project employs about fifty technicians, drivers and skilled workers, and is planned for completion in Autumn 2004. The Jutland motorway will then be completed at last!

Smac Acieroïd carried out the waterproofing of the deck of the Tulle viaduct, on the A89 motorway. A surface of 15,800 sq. m. was coated with Baryphalte pont, an innovative mastic asphalt-based waterproof product by Smac Acieroïd. With very tight deadlines imposed by the project owner ASF (Autoroutes du Sud de la France), the time frame and the surface area concerned, the project had to be entirely mechanised. “It was absolutely necessary,” recalls Jean-Louis Guillaume, the Division Head. The welding, varnish and mastic asphalt were applied with the appropriate machines: a Linhoff welding machine that carried out 1,200 sq. m./day, a spreader machine that worked at a rhythm of 8,000 sq. m./day, a machine that applied 1,200 sq.m. of Neophalte NG 30 per day, etc. This resulted in a very efficient laying job, with a high price/quality ratio. At the end of the operations, the team celebrated with the traditional “asphalt roast", where a carefully protected leg of lamb is roasted in a barrel of hot asphalt. There was a little air of euphoria in the region that day.

Tulle viaduct: moving with the machines
From early August to mid-September, Smac Acieroïd carried out the waterproofing of the deck of the Tulle viaduct, on the A89 motorway.

Pipeline tricks near the Riviera
Suburbaine Port-de-Bouc, a division of Spac, recently laid a pipeline on difficult terrain, in the region of Lavéra. The pipeline passes near the saltwater lake ‘Etang de Berre’, not far from Marseilles. This was a very tricky operation because of the natural constraints and limitations of the landscape. This demanding project was launched at the beginning of Spring 2002 and was successfully completed in July 2002. The 1.8 million euro contract was carried out for Geosel, as part of a joint venture with Spie. The laying of the steel pipeline (500 m in diameter and 5-km long) alongside the old pipes, necessitated a great deal of energy and careful planning. The very uneven terrain and its location in this very rocky region explain why the teams encountered so many difficulties during the trench-digging phase. They had to use a rock trenching machine. It was also no easy task bringing the tubes and storing them on this site, which was extremely difficult to access. Another problem was the dryness of the region’s terrain. To avoid all risks of fire, the welding works had to be carried out during the wettest periods and this sometimes resulted in interruptions. The Lavéra project was executed under difficult conditions, but all those who participated left the site with great job satisfaction ... and good memories!
Managers of road networks are of the opinion that porous asphalt mixes have disadvantages especially during the winter. To answer these criticisms, Sacer has developed a macro-rough asphalt mix called Drainoduit, whose main advantage is to reduce the problem of splashing water. This innovative product optimises the draining qualities of the road surface and performs nearly as well as other porous mixes without their disadvantages, especially problems of sitting up. This non-specular, highly homogeneous surfacing, which also boasts a dull finish, has proved to be very effective in terms of skid-resistance at very high speeds. Another advantage is noise reduction which is the same as a very thin layer of bituminous concrete, and it also filters very high frequencies. Users will find that driving in the rain is more comfortable and safer.

Sacer Paris-Nord-Est, who had been awarded the contract for renewing the surfacing of the A6 motorway, to the north of the Fleury toll section, applied Drainoduit asphalt mix in 2001, on a 5-km stretch of the road towards Paris. They treated the other side in June last year. With its many advantages, this macro-rough asphalt mix is a very effective product, with a bright future ahead of it.

In late June 2002, Colas Nord-Picardie executed two Novacol projects: one on the RD 933 road, between Flesselles and Havemars, in the Somme department, and the other on the RD 28, in the Aisne department. Two opportunities for the company to promote its innovative road maintenance technique in the region. The works consisted of reprofiling 2,000 sq. m. of road in Aisne and repairing 8,000 sq. m. of very cracked road in Somme. In both cases, the old materials were recycled onsite using the Novacol process. This new road maintenance technique has one main advantage: the fact that it combines protection of the environment with lower costs. It is a cold recycling technique, therefore one that consumes very little energy, using existing materials. In turn, this results in lower energy needs and less transport of new materials, without forgetting the elimination of pollution generated by these journeys (traffic and noise).

This is the first time that the Novacol method has proved its worth in the Picardy region. The two projects are actually acting as tests for Colas Nord-Picardie. “Our objective in working for these two departments”, explains Christian de Bray, Area Manager, “is to test the new processes, which may then be labelled and used later on larger projects.” One of the positive results of this experiment is the signing of an innovation charter with the General Council. Novacol has played its hand perfectly!
For the 300 employees of the Colas Group who took part in the renovation of runway 2 at the Roissy-Charles-de-Gaulle Airport in August of last year, the large project will remain an unforgettable experience...

“An exceptional project”, one that mobilised three of the Group’s subsidiaries, their highly qualified teams and some of their most powerful machines.
Roissy-Charles-de-Gaulle Airport. Runway 2. It is mid-morning on August 14, 2002, and the tenth day of the runway renovation project. Six pavers carrying 7.5 m screeds are advancing abreast, slowly and methodically. In front of them are four Franex feeders. Further on are two sprayers. Behind the row of pavers come nine CC 501 compactors. To the sides, an army of semi-trailers loaded with asphalt mixes turn continuously… The runway is bustling with activity. The intensity has not dropped since the first day and will remain like this until the last. It is clear that everyone here knows what has to be done and does it, as in a well-orchestrated ballet where the dancers play their part with clockwork precision. The project is to be completed in a week’s time. There can be no delays and certainly no mistakes. The airport, which manages up to 2,200 flights each day, cannot afford to shut down one of its runways for a long time, especially during the summer.

A prestigious project

In financial terms as well as in terms of image, this 10.7 million euro project executed for Aéroports de Paris (ADP) was a daunting challenge. It was also a prestigious mission for the 300 employees who worked on it. The job consisted of renovating runway 2 so that it could receive large jumbo jets like the Airbus A380 by 2006. This renovation comprised, on one hand, the widening of the shoulders of the runway (an additional 7.5 m on each side), and the reinforcement of its structure, on the other hand. Runway 2 was built in the 1970s, and needed to be consolidated and equipped with the latest technological advances to give it more skid-resistance and to improve surface quality. The surface concerned by the works was 70 m wide (40 m for the runway, and the two 15-m shoulders) and 4.6 km long, without forgetting aircraft access and pull-out roads. In all, 90,000 metric tons of asphalt mix and 80,000 metric tons of aggregates were laid over 360,000 sq. m.

Amazing synergy between the Group’s subsidiaries

Three of the Group’s road-building subsidiaries came together to raise the challenge presented by ADP: Screg Ile-de-France-Normandie, representative of the grouping, Colas Ile-de-France-Normandie and Sacer Paris-Nord-Est. Despite their respective commitments to other projects, each subsidiary organised itself to provide the most powerful equipment, especially the largest asphalt-mixing plants, and rallied their employees with advanced skills in asphalt mixes. Those who took part in this exciting adventure had to postpone their vacations. “We would never have managed to win the contract if we had not had such synergy between subsidiaries. And we wouldn’t have been able to carry off the project either. Everybody pitched in. Some subsidiaries had to postpone a few projects and other had to finish them off quickly. Men were brought in...”

Résipoly Chrysor lights up the runway

After the runway had been renovated, all that was left to do was replace the 1,850 airfield lights. Once the old installations had been removed, the gaps were filled with a quick-hardening epoxy mortar and the new lights were sealed with a high-performance slurry seal.

The 150 metric tons of resin product required were specially developed and formulated by a subsidiary of the Group, Résipoly Chrysor. The product had to ensure quick mechanical resistance because traffic resumed every morning after the night’s work. The supplies represented sales of 500,000 euros.
ROUTES was a constant concern. It was essential to avoid any delays.

The road construction subsidiaries of the Ile-de-France region supplied their most powerful equipment. The supply of raw materials was a constant concern. It was essential to avoid any delays.

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A wide range of constraints

Because of the size of the project, its urgency and the specific nature of the airport, a large number of other problems had to be settled before work began: negotiating circulation permits for trucks, in August and on Saturdays, with the various ministries concerned, obtaining requests.

The Group had provided for replacement machines to offset any breakdowns.

An unparalleled organisation

Philippe Soisson went to work right from the signing of the contract in February 2002. He had been charged with the coordination and planning of the project and for six months he had worked with the management team to carefully put in place all the pieces of an organisation that would prevent the slightest hitch in operations: “The first difficulty we had to solve was the supply of raw materials. Because of the tight deadlines, it was essential that we avoid a break in bulk.”

In March 2002, a 3.7 hectare platform was built in three weeks to house two TSM25 senior mobile plants (producing 450 metric tons of asphalt mix/hour) and to store materials reserves (85,000 metric tons were delivered in June) and crushed concrete for widening the shoulders (50,000 metric tons).

The amount of asphalt mix produced on this project was particularly impressive. There was even one day when the plants produced up to 14,000 metric tons! To reach such a record, the Group’s plants had to produce 700 metric tons of modified bitumen.

What was Philippe Soisson’s worst fear?

That one of the asphalt mixing plants would break down and interrupt all the work, or inversely, that a machine would stop and result in the forced downtime of the plants. “At one time one paver showed signs of wearing down, but we had another on standby as well as a Franex.”

Another unavoidable constraint during this project was that it was essential to carry out all the works on the entire width, in one go, without ever being able to go back.

To make sure that deadlines were kept, a timetable was drawn up for each workshop, chartering the work, day by day and hour by hour. That was literally unheard of. “It was a timetable that provided for the sequence of all the tasks to be accomplished during the day: laying sand, asphalt mix, earthworks on the sides of the runway, etc. There were two shifts, 6 am to 2 pm and 2 pm to 10 pm. In this way, every site manager knew exactly what task had to be carried out and with whom,” explains Franck Davoine, Operations Assistant.

Likewise each semi-trailer that transported the asphalt mix was assigned to a shift and paver that had been determined beforehand.

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Over 150 quality tests. A dozen specialised technicians carried out over 150 quality tests.

Zoom
A high-flying logistics system

N early 3,500 meals, 600 hotel nights, 10 pallets of bottled water, 220,000 litres of fuel oil… The orders placed by Frédéric Baudet, in charge of Supplies, equalled the challenge: gigantic. This 26-year-old project engineer from the Sacer agency in Pierrelaye was asked to handle the logistics of the project. This mission, which had many aspects, got off to a good start in June, with the raising of employee awareness to prepare the people for the work on choosing and ordering the menus for dispensations of labour laws, managing the security measures related to the public safety and awareness “Vigipirate” plan, etc. For example, each worker had to wear a badge to access the site, and the badge was only granted after close examination of his file. “This meant that it was difficult to replace a worker at short notice,” comments Franck Davoine.

Another significant constraint was safety. In June, all participants followed a 60-minute training course. 12 employees were also trained by ADP in signalling tasks in order to manage the circulation of trucks on the site without danger, since there were planes landing or taking off at both ends of runway 4. This was a heavy responsibility for the men, which they had to shoulder both day and night.

Relaying on past experiences
In an effort to forestall any problems and to benefit from the experience that the Group had already acquired in runway renovation, the runway 2 site managers had asked for the advice of their colleagues from the Major Projects team in Strasbourg. It had renovated the runway of the Strasbourg-Entzheim airport two years previously.

“They gave us a number of tips such as booking hotels long ahead to ensure that all employees had correct accommodation, listing the phone numbers so we could reach any absent workers, etc. We also benefited from their experience in choosing machines according to the expected performances, and layout of asphalt mixing plants to make them more efficient. This enabled us to avoid repeating their mistakes,” explains Philippe Soisson.

Back to August 14 2002. The long and tiring day is finally over. According to a vital, time-worn ritual, it is the turn of the logistics unit to get going, and hand out the 300 meal trays that are kept in refrigerated trucks. For the entire machine to work without a hitch, each piece must work with clockwork precision, of course, even at meal-times.

Today, the project has been completed. It will now become a memory, which everyone will agree is an exceptional one.

The Group hopes to renew the adventure very soon and put the experience acquired to good use.

For this project, the asphalt mixing plants produced up to 14,000 metric tons per day!
The last stretch of unpaved road that links the port of Cotonou in Benin to Burkina Faso, between Natitingou, the Beninese regional capital and Porga, a border village, has taken on a strategic importance. This is the main road that will open up Atakora, the agricultural and tourist region in northwest Benin. The work has been entrusted to the Colas office in Benin.

Another 102 km of road left to surface and the road that connects Cotonou, harbour capital of Benin and Ouagadougou, the capital of Burkina Faso, will be finished. This is a strategic main road of about 1,200 km which, thanks to the continuing development of the Natitingou-Porga stretch, will finally open up the agricultural and tourist region of Atakora, at the north western tip of Benin, and on the Burkinabe border. This road was vital to put an end to the isolation of the region, so that it may develop its economic and tourist potential to the full. The prefecture town,
The track that links Natitingou and Tanguetia may be a favourite route for tourists, but not for local road users. Ususally, the uphill and downhill slopes (gradients of 10 to 12%) are to blame. As for the second stretch, a 52-km section that crosses the plain between Tanguetia and Porga, the last village in Benin before the Burkina Faso border, it is nearly impos- sible during the rainy season and some areas are transformed into muddy mires. In the face of these difficulties, Burkinaabe transport contractors had taken the habit of bypassing the road by using the port of Lome in Togo, which also receives goods for Burkina Faso. Consequently, Benin was cut out of these commercial exchanges.

“The work that we’re currently carrying out in Benin represents Colas’ biggest ongoing project in West Africa,” says Pierre Majoral, Manager of the Cotonou office. “We have just finished a 126-km stretch on the Savalou-Djougou road and we have a total of 230 km of road construc- tion under way all over the country, including the Natitingou-Porga project.”

MEETING DEADLINES WITHOUT CUTTING CORNERS

The project is expected to last twenty-four months, in principle. A third of the project had been completed at the end of October 2002. The earthwork phase should normally be finished by the end of January 2003.

Out in the plains, work to reshape the sub-base began on 20th October. Pascal Picaud, Application supervisor, and his extensive team had to surface a 10-kilometre stretch of road before the end of 2002. The deadlines were tight and there was no room for mistakes!

The long Natitingou-Tanguetia section is in a very mountainous region, so the team moves forward by blasting its way through. The landscape has therefore been altered. The famous “10th slope”, which earned its nick-name from truck drivers because of the steepness of the gradient, has been reduced to 8%. A 2% reduction in gradient is a lot, especially for trucks which arrive overloaded with goods from the port of Cotonou, heading for the North of the country.”

Marc Vinçotte, the Project Manager.

“A 2% reduction in gradient is a lot, especially for trucks which arrive over- loaded with goods from the port of Cotonou, heading for the North of the country.”

Marc Vinçotte, the Project Manager. He supervises the use of equipment and controls expenditure on the project. “It’s a very motivating challenge for me. Thanks to the volume of activity and the variety of tasks, I have discovered the different phases of the building of a new road. This covers everything, from the drawing up of the execution project to signalling, including earthworks, crushing, concrete structures, road bases and surfacing,” he explains. He admits that he’s learned a lot from Marc Vinçotte, but knows that he still has a long way to go. “I’ve always been attracted to Africa. I realise how lucky I am to work on this project with people with so much experience. I’m learning a lot and it’s all very exciting,” he concludes.
New life for Tanguieta

Tanguieta, the last Beninese town before the border with Burkina Faso, is about 700 km from the port of Cotonou, the country’s economic capital. This town was not very accessible and was practically cut off from Natitingou and the rest of the country during the rainy season.

This situation affected the town after the harvests because it found itself with large quantities of crops that it could not transport. Given the difficulty in accessing the town, there was also very little tourism and the population felt very isolated. The new infrastructure will offer new development perspectives for the local populations. As it waits for completion of the new road and its first visible effects, Tanguieta has been given a boost with the significant presence of the Colas employees working on the project. For several months now, there have been an extra 400 people contributing to the local economy.

Apollinaire Hougue: avoiding stockouts

Apollinaire Hougue, 32 years old, is the foreman of this road project. A materials engineer and graduate of INSEET engineering school in Yamoussoukro in the Ivory Coast, he is responsible for monitoring the use, servicing and maintenance of the equipment fleet (150 vehicles and machines). Luckily, he is not alone in carrying out his rather important mission. He works with a great team of 34 people. “What is most difficult, on this project, is the distance between the site and Cotonou, where we get our spare parts. That is why we’ve set up a shuttle that does two return trips each week. This way, we’re able to keep the risk of a stockout to a minimum,” explains Apollinaire Hougue. “The work conditions are sometimes difficult, but the great atmosphere of the team both on the site and in our living quarters makes things much easier.”

It was important to put an end to the isolation of the region. With this road, the Atakora region can develop its economic and tourist potential, especially the Pendjari nature reserve.
Site supervisors are key players in the public works, construction and civil engineering sectors. They leave their mark on all the projects that they work on. Their business acumen, expertise and charisma determine the successful completion of a project as well as the ones that will follow...
The site supervisor is essentially a person who works in the field and manages projects from the signing of the contract with the prime contractor until the acceptance of the project. "When people ask me what I do, I sometimes sum things up by telling them that I sell roads," recounts Thomas Celle, a 36-year-old site supervisor working with Colas Rhône-Alpes in the Lyon region. "This is because I often have to manage everything on a project, from when we take over the job to billing, and not forgetting, of course, the execution and follow-up."

**Co-ordinate, supervise, and even win contracts**

The list of tasks entrusted to the site supervisor includes the organizing, planning and checking of the project. The number of tasks depends on the size of the project. In many regions, the site supervisor’s daily tasks are not restricted to the co-ordination and supervision of projects. They often begin long before the work itself because the site supervisor has to set up and maintain business relationships with major clients (housing construction and management, naval dockyards, etc.). "In my region, the job spec often encompasses this type of mission," says Christian Mathieu, 50 years old. He has been site supervisor for nearly twenty years now and is today based in Caen (Smac Normandie). "And then, there are also the little files given to the design department, invoicing, the financing of the budget, and, of course all the administrative work that goes with each project (site and project reports, etc.)." Another example is the Colas Airvault district, in the Deux-Sèvres department. There, the site supervisor covers several subdivisions and must look for new clients, from the public as well as the private sector, answer invitations to tender, draw up price quotes, do the costings and supervise several projects, all at the same time. "From the initial programming to the ultimate invoicing," points out Yannick Delbarre, 32 years old, a site supervisor since 1997.

Sometimes, the site supervisor receives the project at a more advanced stage. These are projects that are transmitted by the company manager when the tender has been won and the contract signed. Whether the site supervisor comes in early in the project or much later, he must ensure a fruitful business relationship with the client. Site supervisors require other qualities in addition to these basic ones: the ability to listen (to the hierarchy, workers and clients), authority (exercised both constructively and with a human touch), discipline, common sense, a sense of organisation, courage, honesty (towards themselves and others), the ability to understand the problems presented to them (teams, clients, management), no failures and, most importantly, the will to win, persistence, charisma (to help them knit the teams together), people skills, etc. Basically, all the imaginable qualities that make site supervisors well-rounded people!

**A project often begins upstream of the actual work. Plans and business relations with the client are also part of the site supervisor's job.**

**CAREER PATH**

**Following a vocation**

D o you want to know about the collateral damage of the Gulf War? Eric Lambert can tell you all about it because the war had a direct impact on his education. In 1991, he had just graduated with a degree (DUT) in civil engineering and was going for a scholarship at an engineering school whilst working. "At the time, a group of companies was selecting the best candidates to give them direct assistance," he recounts. "With the war, budgets were cut down and the number of beneficiaries as well. And I was right in the middle of it!"

So, I was unable to get the scholarship and continue my studies." However, Eric was determined to become a civil engineer and found his first job with Somaro. He stayed there from 1991 to 1998, first as a junior site supervisor, before becoming a full supervisor in Bordeaux, for the project on the A837 motorway. From there he moved to the Mediterranean office of Sacer Sud-Est, in charge of the sector of Toulon.
The site supervisor must follow the works from start to finish.

The actual co-ordination of the project can be tricky. "Supervising a project means finding the resources (human, equipment and financial) to plan and carry out the works from beginning to end, as safely as possible, and at the same time ensuring that the final quality is faultless," explains Philippe Grare, 34, who has been a site supervisor since 1996 at the Centre Colas in Calais (in charge of two large projects: the maintenance of Eurotunnel networks since 1993 and triennial contracts for porous asphalt mixes on the A16 motorway). "Throughout the project, the supervisor must always be ready to listen to the client, draw up estimates and find solutions to each problem."

Forming a winning team with site foremen

In the same way as the conductor relies on some of his musicians to direct the whole orchestra, the site supervisor, in the field and without a baton, relies on site foremen, the veritable "right-hand men" who help him carry out his mission successfully.

"Once we have the purchase order, I start preparing the project with the site foreman. I send him the safety and quality instructions, and I plan the work so he can manage the project on a daily basis," explains Frédéric Ambrosio, 32 years old, a site supervisor since 1994, who works for the Somaro Centre-Ouest office. "It’s very important for things to work smoothly with site foremen. They must be very dependable. He is the one person who is on the site at all times and who can ensure the daily progress of the project."

The supervisor manages work with his team on a day-to-day basis while the site supervisor manages the relations between the different participants and keeps an overall view of the project. "It is true that each one of us has a specific job to do. That being said, when the people get on well, it can create some excellent teams."

Philippe Grare agrees: "What we do is we conclude a sort of contract with the site foreman, who’s in charge of the actual execution on site."

This opinion is shared by Thomas Celle, who sees this relationship as "a kind of partnership beyond all hierarchy, teamwork that makes it possible to avoid pitfalls and to detect opportunities and advantages." "In general, at Colas, site supervisors first go through the experience of the site foreman phase, and this means they can learn the fundamentals of the job," Yannick Debaine points out.

However, it is not always easy to create successful pairs from the first day of working together. "When I first became a site supervisor, relations with site foremen were actually quite difficult. I was really very hard on myself and my men and I was too set on imposing my way of doing things," admits Guy Favreau, site supervisor at Rambouillet (Sacer Paris-Nord-Est). He adds: "Today, I work more often with site foremen when I prepare projects and instruction specifications. I leave the management of the technical aspects to him. In short, I leave him to do his work, I give him more leeway, but, naturally, I keep an eye on the advancement of the project."

Eric Lambert, 36, and a site supervisor at Toulon (Sacer Sud-Est), concludes with a comment on the crucial issue of collaboration between site supervisor and the site foreman: "At Toulon, I work regularly with three site foremen. I adapt to the personality and competences of each one of them, becoming either more outgoing or more serious depending on the person I’m dealing with. This then enables me to ask them to do what I need them to do," he underlines.

"For the tandem to work, the site foreman must be relatively self-reliant, while the site supervisor is the person who co-ordinates everything, a true conductor and one-man band."

Two requirements: availability and geographical mobility

Although the site supervisor spends hours carrying out the unavoidable administrative tasks and supervising the work of the design department, he spends a great deal of his time going from one site to another, as well as going to see suppliers and clients. This involves an ever-changing timetable and, in turn, a high level of availability.

Another characteristic of this job is geographical mobility. In the public works sector, where a third of employees work abroad, this mobility can sometimes take the site supervisor outside France, and even half-way round the world!"
The great leap forward

Safety within the Group is really improving! Accident frequency is decreasing, especially in the French subsidiaries and offices. In France, the Group’s safety index (frequency rate x severity rate) has improved by 26% in only a year. An increasing number of sites had zero work related accidents with sick leave during the year. These sites grew in number from 126 in 2000, to 154 in 2002. Special mention should be made of the Colas Sud-Ouest subsidiary which obtained truly excellent results: 24 sites with zero work related accidents with sick leave in 2001. That is a record! Outside France, the best safety results came from North America. The Group’s other major geographic areas present a variety of situations. In Europe, however, the figures have improved significantly. This trend can be described as a global one, even if there is still a great deal of work to be done.

List of subsidiaries and offices rewarded for the quality of their safety prevention in 2001

- France
  * Colas Centre-Ouest (Airvault Centre)
  - Special FNTP safety competition prize
  * Colas Nord-Picardie, Colas Nord-Picardie (Somme office), Colas Rhône-Alpes (Saint-Etienne Centre), Colas Nord-Picardie (RCFC Routes), Colas Centre-Ouest (Airvault Centre), Colas Nord-Picardie (Quéret BTP Centre)
  - Winners of the USIRF competition (11 prizes out of 14)
  - Spac
  - Gaz de France-OPPBTP Safety Trophy
- United States
  * Simon
  - First place Safety Award (Wyoming Contractors Association)
  * Barrett
  - AGC Construction Safety Excellence Award Winners, Napa Diamond Achievement Commendation
  - Racees 
  - Work Zone Safety Award (Georgia Department of Transportation), Gold Safety Award (Liberty Mutual Insurance Group)
  - Canada
  - Works Alberta
  - Certificate of Recognition (Alberta Construction Safety Association)
  - Great Britain
  - Colas Ltd, South West Highways
  - Gold Award (Royal Society for Prevention of Accidents)
  - Thailand
  - Tisco (Pitsanulok plant)
  - Ministry of Labour and Social Affairs
  - HSE excellence award

Colas shows the way forward

In five years in France, the number of traffic accidents in the Group has dropped by 33%. Colas is not going to sit on its laurels after these spectacular results and is setting itself ever more ambitious targets. It all began with a clear observation: there were too many traffic accidents inside the Group. Depending on the site, plant or establishment, the annual number of accidents ranged between 14 and 39 for a fleet of 100 vehicles. This had heavy and sometimes tragic human consequences. The financial consequences were also considerable, especially in terms of insurance costs. The problem had to be tackled at its roots and a proper prevention policy developed.

In 1997, Colas signed its first Road Safety Charter with the State. The Group made a commitment to reduce the number of accidents by 25% in three years. First of all, it developed indicators that were to be disseminated to as many employees as possible, and at the same time launched a strong message: “We are road professionals and road risks concern us directly. We are a world leader and we should therefore set an example.” The management mobilised itself and created an internal network. In each establishment, a volunteer employee was appointed Road Safety Relay. Today, there are 350 of them, of all ages and from all departments. With three-days of training in the Scope program (a French program covering driver safety, organisation of the vehicle fleet and environment) given by the insurance company AXA, they also train their colleagues in safe driving. To date, over 11,000 employees have benefited from this specific program.

Armed with a road safety communication kit, the Relays also conduct driving audits and carry out post-accident analysis.

They have their own pages on the web sites where they conduct a chat forum. They communicate with each other via the quarterly Relay Letter. And each and every subsidiary also has a Road Safety Steering Committee, with the appropriate safety, equipment, training, insurance and communication representatives. This road safety awareness policy is also based on such initiatives as in-house conventions, inter-subsidiary challenges, etc.

Very encouraging results

When the first Road Safety Charter expired in 2000, the results were good. The charter was renewed in 2001, with the future objective of reducing the number of road accidents by another 5% in three years. These objectives have already been exceeded. In 2001, there was an 8% drop in accidents. Some subsidiaries have a frequency of 0.09 (number of accidents per number of vehicles). In all, between 1997 and 2001, the accident frequency dropped by 33%, while the Group’s fleet of vehicles and machines in France (and overseas territories) rose by 40% and the number of employees by 20%.

However, although the Group, in France, can be proud of these results, it should not lower its guard. The challenge continues and it includes all of the Group’s foreign subsidiaries.
Colas must develop an ethic of personal responsibility at the wheel, because the road should not be a place where people are killed. It should be a safe place to travel,” declared Alain Dupont, CEO of Colas, as part of his address to the 350 Road Safety Relays. They had come together for the first time at the Convention on November 18 last year at Opio, in the southeast France. This objective is in line with the Group’s determination to set an example. The purpose of the Road Safety Relay Convention was to encourage the exchange of experiences and to review the economic impact of prevention in this field. It was also the occasion to thank these volunteer employees who train their co-workers in safe driving.

“Changing attitudes and behaviours
In France, the frightening death toll on the roads (8,000 deaths every year, compared with less than 4,000 in the UK) is mainly linked to the attitudes and behaviour of motorists. In this context, the Road Safety Relays have two missions: to train employees in standards and preventive acts and increase their awareness of the importance of road safety. For example, they have organised “tool box safety talks” on sites (around such themes as fatigue management and drink driving), exercises on simulation software, annual driving audits, demonstrations by the local police station, and more. In addition to the action of the Relays, the Group’s road safety prevention policy, aimed at changing attitudes on the road, takes on many different and often original forms. For example, last year in June, to raise awareness about the problem of alcohol behind the wheel, employees were each given a breathalyser. Yet another initiative: in some subsidiaries, management decided to change its way of speaking about the road and travel, in order to remove the negative aspect of driving (“I went to Limoges”, instead of “It only took me two and a half hours to get to Limoges”).

The solutions adopted by subsidiaries outside France have been adapted to the local context. They take into account the reliability of roads, the performances of the machines used, laws in force as well as habits. In the United Kingdom for example, where there is already a high level of awareness, the Road Safety Relays have come up with the “12 commandments”: “Inspect your vehicle before taking it out”, “Look a good distance in front of you”, “Be ready to react”, etc. In Poland, when Colas arrived in 1998, there were practically no traffic signs on sites. Since then, the company has systematised the use of signs, flashing lights and light indicators. As for Canada, all employees who have an accident under the influence of alcohol must follow a “rehabilitation program”. In addition to the many interventions of employees from the Group during the Convention, there were testimonies from outside speakers, which helped everyone broaden their vision of the importance of road safety. All in all, the Convention was very successful and shed light on the Group’s unspiring efforts for road safety. These efforts and initiatives were hailed by Gilles de Robien, Minister for Equipment, Transport, Housing, Tourism and the Sea, who encouraged Colas, during a recent interview, to promote a “peaceful road culture”.

Laurence de la Ferrière, a guest at the Convention, crossed the Antarctic alone in 1999.
**PRODUCT**

Colgrip: a “weapon” in the fight against accidents

It’s official. Colgrip increases skid-resistance considerably. The safety surfacing product developed by the Colas R&D department contributes to improving road safety. This is the conclusion of two accident studies recently carried out on sections of dangerous roads in the Paris region that have been covered with Colgrip surfacing on the “Submarine” curve of the A10 motorway near Palaiseau, the number of accidents has been divided by 5. The number has also been divided by 21 on the RN118, on the Pont de Sèvres stretch. This high-performance skid-resistant surfacing is composed of a special resin-based bituminous binder and very small (1 to 3 mm), hard and non-polishable aggregates (calcinated bauxite). This enhances its skid-resistance performances and reduces braking distances by a third. Colgrip is particularly suited to dangerous bends, crossroads and other difficult spots. It is efficient even during rain and is a veritable “weapon” that local and regional authorities can use in their fight against road and traffic accidents. At a time when the government has made road safety a national priority, Colas wishes to step up the marketing of this great product in France. It has encountered great success in the United Kingdom with 2 million square metres applied to date.

Colas has produced two films to help promote Colgrip. One is a small collection of testimonies, one in particular is that of the Road Network Director of a town near London, who is very satisfied with the results he has obtained with this new surfacing. The other shows very conclusive comparative braking tests carried out on the Jean-Pierre-Beltoise racetrack in Trappes, a town not far from Paris. Accompanied by the Colgrip presentation brochure, these two films have already been widely distributed to local and regional authorities in France, and also to the mayors of towns with over 50,000 inhabitants.

**BIRTHDAYS**

A colourful 75th birthday party in Switzerland!

On the initiative of Jean Beauverd, Chairman of Colas Suisse, the 650 company employees and their clients met in Geneva on June 13 and 14 last year to celebrate the 75th birthday of the Swiss subsidiary in style. There was a highly original event among the various activities: a modern dance ballet, specially created for the occasion, on the theme of roads. The subject was illustrated with innovative and exciting choreography and costumes (grey and yellow working gear), great scenery and accessories (building equipment) and impressive music (drums). The event was attended by Olivier Michaud, Motorways Director of the Swiss Confederation and Chairman of the World Road Association (APCPR). During his speech, he underlined the leading position of Colas on the road market, in Switzerland as well as in the rest of the world. He also spoke about the future of roads and the evolution towards a more environmentally friendly road.

15 candles for Colas Iceland

Colas Iceland has celebrated its fifteenth birthday. The event was not only festive but also rich in business opportunities. Clients, employees, professional relations were all there to celebrate this milestone. After a general presentation of the Colas Group, eight speakers spoke on the following theme: “Asphalt and emulsions, what uses and under what circumstances?” This was a technical topic that interested all of the 150 people who had been invited by Colas Iceland. “150 participants in Iceland is a lot,” commented Sigurdur Sigurdsson, who was the General Manager of the Icelandic subsidiary at the time. “Our country has 260,000 inhabitants, so that means we welcomed the equivalent of 0.05% of the population!” The participants then gathered for a cocktail before going to taste the local specialties and a birthday cake adorned with the Colas logo. “Apart from the excuse for a party,” concluded Sigurdur Sigurdsson, “this event enabled us to promote our entire product and service range with our clients and prospects.” There is no doubt that the celebration of this birthday will reap commercial benefits!
Axter on the Web

For more information about Axter, the waterproofing specialist, all you need to do is go on the Internet, at www.axter.fr. Click! Start with the “Who are we” home page and then move to the “Careers” section where job offers can be found. There are also sections like “Our businesses and markets”, “Our waterproofing solutions”, “Our references in France and overseas”, “Our networks”, and “Assistance and service”. Axter’s new web site thus provides an exhaustive presentation of the company and its products on a green background. 3D computer graphics give a vivid illustration of the different waterproofing processes that Axter proposes to its customers, depending on the climate, on type of roof, etc. The site is easy to browse and full of all kinds of practical information. You can also download data sheets on this user-friendly site. Each section encourages visitors who wish to contact an Axter specialist. To find out what’s new at Axter, learn about its latest product or the trade fair calendar…just click!

The old buildings will either be destroyed or entirely refurbished. The project was difficult as work continued on site and the timeframe was very tight. That is why Axter did not hesitate to ask Colas Nord-Picardie to carry out all the platform works, external works and also the asphalt mixes for the roads and car parks. It also entrusted Colas plant division with the entire piping process (over 7,000 m) and Smac Acieroid with the roofing, cladding and waterproofing of all the buildings. The natural lighting, ventilation and heating of the buildings were entrusted to Skydome, Colt and Essèmes Services, all Axter subsidiaries. If you need a job to be done properly, just ask a friend…or a subsidiary!

Modernisation work on the Axter plant in Courchelettes, in the north of France, began in mid-September 2001. The project should be completed early this year. The extensive works have not stopped the plant’s operations. Axter is the manufacturing subsidiary of Smac Acieroid and specialises in the manufacture of different bitumen-based membranes. In 2001, the subsidiary decided to completely renovate its plant at Courchelettes. It was a major project, with ambitious objectives: bring together all the company’s waterproofing material production activities and build the most innovative and modern plant in Europe. Naturally, this program had a constraint! The modernisation works were in no way to disturb the operations of the site, which produces about 26 million square metres of waterproof membranes every year.

Work began with the laying of 7,000 square metres of Coletanche NTP2. This was required because the site used to house a refinery. With a total surface of 46,000 square metres, the site, which will be completed this winter, will consist of a new hall that will house two new production lines, two brand new buildings with a surface area of 2,000 and 6,000 sq. m. for storing raw materials and finished products, a new research and development laboratory and entirely renovated and expanded offices.

Without halting production waterproofing specialist Axter is modernising its Courchelettes plant in the north of France. Work will be completed early 2003.

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Emulsion: putting theory into practice

And it was a highly successful operation! Over a thousand participants from about sixty countries, representing the most diverse sectors of industry (bitumen emulsions, textile, agriculture, foods, pharmaceuticals, cosmetics, paints, paper, etc.), came to share their experiences and discuss issues with leading scientists.

Sharing knowledge and experience
Fundamental theories and industrial applications: the congress consisted in reviewing the progress accomplished with respect to the formulation, application and implementation of emulsions, and to give prominence to process engineering. For Alain Le Coroller, Group Sales Manager, who was in charge of organising the congress, “ever since the patent of the first bitumen emulsion was filed in 1927, the development of emulsion has always been accompanied by scientific and technical data. Some industries spend a lot of money on research. Our idea is to pool all the knowledge generated by our research. We have a lot to learn from one another.”

Internationally reputed speakers
In his speech, Jean-Eric Poirier, Scientific Manager at Colas, stressed the importance of theoretical knowledge of “soft matter”. This theme is dear to Pierre-Gilles de Gennes, the Nobel prize-winner for Physics, for the understanding of the phenomenon of emulsion applied to bitumen manufacture. Some 250 papers, organised into 18 workshops, also produced some very lively discussions and, for the very first time, the congress organised a symposium on cold asphalt mixes.

A warm atmosphere
The congress was also marked by the warm atmosphere that prevailed: coffee breaks that allowed informal discussions, working lunches, exhibitions in a hall that encouraged encounters, poster sessions that made it easy for participants to talk, etc. “We focused on moments of relaxation and conviviality by organising an exhibition area next to the poster area. What was remarkable was that there were twice as many exhibitors as the previous congress, which goes to show the interest of industrial companies in our event,” enthused Alain Le Coroller. Other highlights of the congress were the gala evening, with a dinner in the old Subsistances Convent, and the opening reception that began with a concert by the Harmonic Orchestra of the Republican Guard accompanied by the French Army Choir.

Increasing concern for the environment
The latest congress demonstrated that the environment is playing an ever-increasing role in the CME. Henri Molleron, Environmental Advisor to the CEO, evoked the great significance of emulsions for the protection of the environment: “Over three-quarters of bitumen emulsion applications concern tack coats, chipping, and storable asphalt mixes. In these applications, the replacement of bitumen fluxed by emulsions is a real breakthrough for the environment. It is, however, necessary to conduct a precise assessment to appreciate the actual gain achieved.”
The big crush: a high-performance plant

It took the ETPC quarry, a Colas subsidiary, a record time of only four months to erect a new crushing plant on the Koungou site. This new ultra-modern facility, which can handle 320 tph (compared with 120 tph for the old plant), will enable ETPC to play a greater part in the future economic development of Mayotte. This will also enable ETPC to cope with the expansion of the construction and public works business that is expected for the island in 2003. The plant, which is managed by automated machinery, will not only increase productivity, it will also guarantee a substantially improved quality of production with its state-of-the-art sieves and crushers. The plant has an autonomous and regular supply thanks to a stockpile on the site itself. The presence of silos also prevents the unnecessary movement of vehicles and makes it possible to load the exact quantity required in one go, using electronic badge readers. Lastly, the ever-important safety of the personnel is guaranteed: the plant complies with the most recent international standards in the field.

ETPC called on the expertise of the Group’s other entities to install this new plant: SMEC Mayotte for civil engineering and the Equipment Department of Colas Mayotte to clear from customs and transport the 500 tons of equipment brought from France to the site on the island. Under the supervision of José Beltran, the Quarry Manager, ETPC coordinated all the works and dismantled the old plant at the same time that the new one was installed. All this was done, “without leaving a single ton for the competition to sell during the four months that it took to carry out this exciting project,” boasts José Beltran.

Discovered twenty years ago, Active Joint has continually improved its performances. Today, it remains the most competitive pre-cracking process, in terms of both efficiency and cost. Invented in 1983, the Active Joint has had to prove its worth. It has been continuously improved and a new patent was registered in 1996. It is applied on materials treated with hydraulic binders to help fight cracking. It improves aggregates by organizing the cracks, which then become small and even. The form of the sheet inserted into the road ensures the continuity of the slabs. This reduces the deformation of the base course, which can thus be made thinner. Another particular cost-cutting characteristic is that the process allows for a single-layer structure, and saves having to apply two thick layers. Among the most recent projects where the Active Joint solution has been adopted is the bypass at Hôpitaux-Neufs, near Pontarlier in the east of France (the Doubs region), which was recently inaugurated, and also the doubling of the RD64 secondary road in the Haute-Saône department, also in the East of France. “Regions with a continental climate have tended to use road foundations treated with hydraulic binders,” explains Jean-Luc Aubert, Sacer technical manager and one of the inventors of the principle. “However, the increase in the price of bitumen these past few years has made the Active Joint very competitive almost everywhere, from Brittany to Mauritius, in places where we have on-going projects. Clients have not yet got the reflex of using Active Joint, basically because they are not familiar with the remarkable qualities and high-performances of this process.” These very qualities were recompensed in 2002 with the Global Road Achievement Award, awarded by the International Road Federation (IRF) in Las Vegas.
PRODUCT COMMUNICATION

CD-ROMs: everything you need to know about the Group’s products

There are now 3 CD-ROMs which present the products and road techniques used by Colas, Screg and Sacer. Just click and get “Colas, mastering road techniques”, an original presentation on the home page, illustrated with magnificent photos. This complete CD-ROM is organised in four sections. The first three product catalogues, in alphabetical order and classified by category. It contains precise definitions and product data sheets. The second section entitled “Meeting your needs” presenting all Colas’ solutions to problems of water resistance, cracking, deterioration by hydrocarbons, etc. The products vary according to their different applications. “Some technical solutions” presents case studies. For example, everything you need to know about the RD 21 secondary road at Saint-Christophe-du-Lignon, no holds barred! All the product characteristics are presented in this section. The fourth section of the CD-ROM is “Your contacts at Colas” and shows all the Colas offices, companies, plants and subsidiaries on a detailed map of France. The Screg CD-ROM has been designed along the same lines: “Catalogue of techniques”, listed in alphabetical order and classified by product family. “Meeting your needs” illustrated with examples of structures built by Screg subsidiaries; “Screg’s expertise” and “Your contacts”. The CD-ROM is illustrated with statistics, technical sheets and many pictures. A brilliant idea is the “Glossary” which laymen can consult and which gives definitions ranging from “rutting” to the description of the structure of a road, and the definition of “stress”. There are also articles from various sources in the specialised press, regarding the brand’s various products and many techniques. The collection ends with the CD-ROM of Sacer products, which is also very well done and complete. With these three CD-ROMs, any one interested in any subject involving the Group’s road construction products and techniques can quickly become an expert on the subject!

PRODUCT COMMUNICATION

Coletanche on campaign

Colas has recently launched a new advertising campaign for Coletanche, one of the Group’s flagship products. The eight-page colour brochure, accompanied by a video, provides a great deal of information regarding the manufacture of this waterproofing geomembrane, its application, performance and its various uses. Twenty-five years after it was created, Coletanche, which has continued its research and development in order to maintain its leading edge, can be said to have reached maturity. It is a highly technical and particularly sophisticated product as demonstrated by Coletanche CS, the latest product of the range, which was launched in 2001. “Coletanche, total protection...” is not merely a slogan that is printed on glossy paper. Waterproofing of pure water reservoirs, dams and canals, the protection of water tables, lining of storage centres for all different kinds of waste, and much more... the special Coletanche brochure clearly illustrates the full potential of this remarkable product, in particular, its exceptional resistance to corrosive chemical products and the most aggressive leachates. In this era of sustainable development, the emphasis in the brochure is placed on its many environmental applications. The cover title of the new brochure is “Coletanche, a highly advanced barrier for environmental protection”. The document also mentions that the geomembrane is manufactured under permanent control, in the ISO 9000 (2000) and ISO 14001 certified Galway plant, in Ireland, and has had a remarkable success that continues to grow (over 7,000,000 sq.m. of Coletanche laid worldwide). The new brochure ends with a technical data sheet and a list of references of the most recent and largest Coletanche projects.
Record bitumen sales for Tasco

Listed on the first market of the Thailand Stock Exchange, Tipco Asphalt Public Company is the country’s largest distributor of bitumen. Colas acquired a significant interest in the company’s capital in August 2000 and, with the founding family, holds the absolute majority. Founded in 1979 by the Supsawat family, this Thai company imports bitumen from Singapore and produces emulsions. It became the market leader in the early 1990s, establishing bitumen depots and emulsion plants all over the country and turning Thailand into the world’s number four emulsion producer. The Group rapidly expanded until the crisis in 1997. To offset the downturn in the domestic market, in 1998 the company went into a joint venture with the local administrations of two Chinese provinces to manufacture and distribute emulsion and modified bitumen. Also a partner with Colas in India, the company has managed to maintain its levels of business thanks to its development on the international market. In 2002, Tipco-Tasco sold 600,000 metric tons of binder in its varied forms (crude or modified bitumen, emulsion or special products) and increased its sales with the operation of five bitumen depots, a fleet of 500 tank trucks and the management of four ships. A fifth ship, with a capacity of 6,000 metric tons, should be delivered in June 2003.

Roads…pave the way with passion

Lying on his stomach and obviously very absorbed in his work, a little boy is playing with toy trucks and construction machines... The traffic cones and safety barriers are in place, as are the figurines in their overalls. The boy is filling a truck with sand. He’s building a road. Many adults who see this image chosen by Colas for its new corporate recruitment campaign, will be cast back to when they were children and played in the sandpit with their favourite toys. This year, Colas chose a decidedly original tone for its recruitment drive to employ 3,500 new people. This time there’s no hard hat or eager, young manager who seems to be striding purposefully towards his bright future. Instead, it is a simple message: Warm and consensual and illustrated by the slogan “Roads... pave the way with passion”. The image addresses all the different populations and functions of future applicants that the Group is looking for (from the future apprentice to the engineering graduate) and is aimed at bringing out vocations which are often ignored. The campaign’s originality also lies in the fact that it is shown in three types of media, to touch as wide a public as possible. Firstly, the written press. Since September last year and up until March this year, full-page advertisements have been placed in major newspapers and magazines, professional magazines, free-circulation magazines and student magazines. Secondly, on JC Decaux billboards (big posters and bus shelters) and this for the first time ever for a recruitment drive for one week. Last November, the Colas poster was displayed on 3,200 signs near where young people gather, in towns with more than 200,000 inhabitants. Lastly, the Internet. The Colas careers site (www.colasrh.com) has just been modernised and reorganised and efforts have been made to increase recognition of the site (referencing with search engines, advertising banners on other employment web sites, etc.). The Group’s 2002-2003 recruitment campaign is scheduled to last six months, during which the spotlight will be on our budding Project Manager who, we hope, will transform his passion into a career when he grows up. Six months for Colas to become firmly established in the mind of its future employees...
Colas attracts a lot of attention at two prestigious trade fairs

Large and inquisitive public, ministers, elected representatives, Scintiflex, a palm reader, Colgrip, dynamic sales personnel, and many more. This motley list illustrates the activity that was buzzing around the Group’s stands during the two prestigious trade fairs that were recently held at the Paris Exhibition Centre at Porte de Versailles: the World Car Show and the French Mayors and Local Authorities Fair.

From the Paris Car Show...

The last version of the Paris Car Show (Mondial de l’Automobile), the world’s leading car event was held from September 28 to October 13 last year. Colas attended the fair for the second time. Its stand, which brought together the Group’s three road construction and maintenance businesses – Colas, Sacer and Screg – proposed several activities on porous asphalt mixes and Colgrip, a high skid-resistant safety surfacing presented to the public for the first time. Every day throughout the duration of the trade fair, between 10 am and 10 pm, even and especially on weekends, they welcomed an unending stream of people, professionals, politicians and local representatives, all eager to learn about the products presented by the Group. This was proof of the wide interest in innovations contributing to road safety.

...to the Mayors and Local Authorities Fair

This fair took place from November 19 to 21, 2002, at the same time as the Congress of French Mayors, which was attended by 8,400 participants. For this fair, each trademark had its own stand. The star of the Colas stand was Colgrip, although Coldraine and Colclair were also a hit. The stand was a great success and was always busy. There was a palm reader at the Sacer stand, who offered to tell visitors their fortunes, or their ’roads to success’! After they had been identified as mayor, be it of a large town or a small village, located on a mountainside or in the country, the most suitable Sacer products were proposed. Even Jean-Louis Debré, speaker of the French National Assembly, had his palm read! Another visitor to the stand was the Minister for Local Authorities, Patrick Dewdjian. Visitors to the Screg stand were welcomed by sales personnel as well as “Compomac, the robot penguin”. There was a scale model of a town, with a presentation of the entire range of asphalt mixes from Screg. Among these was Scintiflex, the sparkling asphalt concrete with its brilliant pieces of mirror glass, which is not only aesthetically pleasing, it also makes the road much more visible. The 400 or so visitors to the stand all left with a cuddly mascot toy! Somaro, the Group’s signing subsidiary, was also present at the fair with Indasco and its marking products, EL-SI and its sound-equipped traffic lights for the visually impaired, SES and its LCD signs.

The Group’s successful participation in these two events demonstrated that it was capable of addressing all types of customers. Thanks to the informal aspect of the many events, the exhibitors were able to have fruitful exchanges with clients. It was also the occasion for the various teams to meet.
Full speed ahead for the 20th Screg Sailing Challenge

Last year it was Bandol. This year in the Gulf of Morbihan, Le Crouesty will host the 2003 Screg Sailing Challenge. Over 70 boats are expected at this increasingly popular regatta.

Screg is already on board. The 20th Sailing Challenge is going to be a great success. The launch is set for May 7 2003, at Le Crouesty, for three days of sailing. On the itinerary: races along the Brittany coast and to close the regatta on the Saturday, an Olympic race!

At the first regatta in 1981, there were only 20 competitors setting off from Port Grimaud. Today, there are some 70 boats taking part in the race, whose spirit is closer to the idea of “sport for relaxation”, opting for an enthusiastic amateur format rather than a professional competition... even if there are trophies to be won.

Three trophies are awarded every year: the Group Challenge, the Friends’ Challenge and the Road Runners’ Cup.

To each his own
The rules are that boats taking part in the competition must be monohulls, with sloop rigging. The length is also limited: boats can be a maximum of 42 feet. The competing boats and crews are separated into three categories, corresponding to three rankings at the finish. The first trophy, the ‘Group Challenge’, is reserved for crews made up of Colas Group or Bouygues Group employees only. The ‘Friends’ Challenge’ is open to all boats of “friendly partner” companies, the sponsors. Finally, as its name indicates, the ‘Road Runners’ Cup’ is only awarded to crews belonging to the road building companies of the Group.

So put a note in your diaries, early May at Le Crouesty. It’s full speed ahead for the 20th regatta!

The Group's new acquisitions in 2002

The acquisition of new production sites and the increase of stakes in some companies improved the Group’s position in 2002, both in France and overseas.

In a generally less enthusiastic economic climate and with little growth on the French market, 2002 saw Colas optimise all the resources of its extensive international network. External growth remained relatively moderate, even though the Group acquired 12 new companies in France and North America.

In mainland France, the Group strengthened its position in aggregate production, taking over the CCM quarry, the Lazard and Le Yaouanc gravel pits and the company Fritz Golli. In North America, the acquisitions were greater in number. The Group took over the Page and Mac Atee quarries, as well as the companies Penncon, Santaro, EV Williams, Marble Hill, Standard General and Chetwynd.

The acquired companies in 2002 represent a total of:
- 3 million metric tons of aggregates;
- over 120 million metric tons of reserves;
- 1.5 million metric tons of asphalt mix;
- 20,000 metric tons of emulsion;
- 37,000 m³ of concrete.

The Group will seize every good opportunity to continue with a strong acquisition dynamic in 2003.
The many faces of Colas Indian Ocean

From its original foothold in Madagascar, established in the 1950s, Colas has developed dynamic business in this vast region: the Indian Ocean. An unqualified success in a context that has not always been easy.

A simple glance at the map says it all, or nearly all. The Indian Ocean region covered by Colas is a huge and particularly varied one. The region stretches from Djibouti to South Africa, Reunion Island to Madagascar, Mauritius and Mayotte, the Comoro Islands, right up to New Caledonia. These eight "territories" are separated by several thousands of kilometres and up to nine time zones. Communication inside this vast area, made up of many islands, is not always easy.

The ocean forms a natural barrier, creating isolated markets in which the different companies have to demonstrate a great capacity to adapt if they are to develop well. That is what Colas has achieved. The Group generates a turnover of 245 million euros in this region thanks to a very wide portfolio of projects. In this geographical area, roads represent only 60% of the Group's business. The remainder is made up of building and civil engineering works of all types: construction of the French secondary school in Antananarivo, the building of the main pier in the port of Mauritius, renovation and building of airports in Djibouti, Mauritius, Madagascar, Vanuatu, Wallis-et-Futuna, and more. Colas is everywhere.

In Mayotte, for example, the Group works in an impressive range of sectors: drainage, heavy carpentry, framework, and even laying of underwater cables from ships. It was also Colas who built the hospital in

In this region, the Colas sites are highly diversified. Roads represent only 60% of the Group's activity. Above, the Mamoudzou police station in Mayotte.
Mamoudzou, which has the largest maternity wing in France with 5,600 deliveries each year!

Employee versatility
This diversity of activities is not always easy to implement. It requires very versatile staff. To achieve its objectives, Colas employs 120 expatriates and relies heavily on local labour. In all, the Group employs nearly 4,500 people in the region. This figure may seem very high considering the turnover generated, but it is explained by the disparity of economic levels of the countries in the area. “Between Madagascar, which is one of the poorest countries in the world, and Reunion Island, a French overseas department, there are very different development levels and consequently very different living standards,” explains Marcel Daizé, General Manager of the Indian Ocean area. To carry out earthworks in a place where the minimum wage is the same as in Europe, the Group uses the same equipment as in mainland France.

Marcel Daizé: passion for the Indian Ocean
Discreet but efficient. The General Manager of the Indian Ocean region, Marcel Daizé, is a calm man, who knows how to keep a low profile. There is a keen enthusiasm hiding behind his gentle smile. He loves his work, to such an extent that he hardly has any free time, and loves the region where he has been working for 37 years now (and which he knows like the back of his hand). Marcel Daizé is one of those people who is generous with his time, who consults all the competent people before taking a major decision. He is very forward-looking. He proved it recently by accepting a new challenge just before his retirement: adding southern Africa to his region. “With only two years to go before retirement, he could have been less enthusiastic,” notes Christophe Guy. He may soon be retiring from Colas, but he will not be leaving the region. His entire life is here, in the Indian Ocean.

The leading construction company in Mayotte, Madagascar and Reunion Island, Colas employs local labour, under the supervision of 120 expatriates.

On the other hand, when it comes to carrying out projects in the land-locked areas of Madagascar, for example, it uses a lot of local labour. In these countries, most of which are economically fragile, the economic influence of Colas is sometimes so great that people associate it with other state-owned companies. The Group is the leading construction and public works company in Mayotte, Madagascar and even Reunion Island, and is therefore a major local player. Its success is all the more remarkable

The “Colas school” in Mayotte
“In a country like Mayotte, you need to provide added value.” It is with these simple words that Christophe Da Poïan, General Manager of GTOI, a subsidiary of the Group in the Indian Ocean, explains the initiative that Colas has taken in Mayotte. It is a very original one. Faced with the high illiteracy rate (75%), the Group decided to open a school in 1996 and a teacher was recruited. Every Friday afternoon and Saturday morning, about a dozen employees go for their classes. A “Colas” adult education method has been developed. It has been recognised by the Department of Labour and should soon be applied to other companies. This civic approach has been an unqualified success.
In the Indian Ocean, lagoons and palm trees go hand in hand with modernity. To get around the problem of the distances that separate them, Colas employees in this vast region have become champions of new information and communication technologies. For all of them, e-mail messages are a communication tool as common as the telephone. Thanks to Internet, employees are no longer forced to travel the distances by plane. Whenever the need arises, drawings and documents are sent to engineering and design departments in the Paris region or in Reunion Island. With just a click, several pages of files can be edited on a plotting board thousands of kilometres away. The use of video conferencing is also common with employees in the region who wish to “meet” their counterparts: the region has been equipped with facilities for seven years now. In the Indian Ocean, the most isolated are never really alone.

It is not always easy to communicate between the islands in the Indian Ocean. These isolated markets call for the ability to adopt both their structures and their staff.

given the often uncertain economic climate. "In 2002, the political crisis in Madagascar blocked all our projects for nearly six months," says Christophe Guy, Regional Director of southern Africa and Madagascar. The management of the sector therefore played the "Group card" by transferring most of the 25 expatriates to other territories in the region.

An ethnic patchwork
"At the crossroads of Africa and Asia, but influenced by Europe for a very long time," Alain Bourdois, Manager of the Colas Mauritius office, points out. This vast region is an impressive patchwork of people and cultures. What do the South African Bantus, Noumean Kanaks and the Indians and Chinese of Mauritius have in common? People are Muslim in one area, Catholic in another and Hindus elsewhere. This human diversity makes management exciting but often rather complicated. The Indian Ocean is truly a land of adventure for those who work there. "A rich region, where you learn a great deal every day," concludes Marcel Daizé.

Some facts and figures
Leading construction company in Reunion Island, Mayotte and Madagascar.
Turnover: 245 million euros.
Group employees in the region: 4,500 employees, of which 120 are expatriates.
One is site supervisor, the others are machine operators, foremen, waterproofing specialists, compactors...

They do their work with passion and share their day-to-day life and projects with us.

Portraits.

A family affair...

Michel Le Strat, David Le Strat, machine operators, France

Michel Le Strat started dreaming of driving big machines when he was a little boy. However, fate decided otherwise and after his primary education, he found a job selling fruits and vegetables on the market. He later went on to become an order clerk in an electronic company, and spent nearly 26 years at this position until the company filed for bankruptcy. The national employment agency (ANPE) then found him a course as a machine operator! And that is how, after the course and a period as an apprentice, Michel joined Colas as a worker 11 years ago. Everything went quickly after that. For over two years, he worked on the Channel tunnel project between Calais and Boulogne-sur-Mer. “I’m finally doing a job I like! I like to be on the move, and here I’m able to do just that! I work on a huge machine, a lime and cement spreader. My job is to stabilise the soil. For example, when there are ruts in the ground, we spread lime to make the soil less humid. Once the soil has become hard, we treat it with a special cement, which gives a result similar to a concrete floor after three weeks.”

Today, Michel Le Strat continues to move around as much as he used to, going further afield than Senlis, where he is based. And to make things even better, he is working with his son David, who has caught the machine virus!

From father to son David, on the other hand, started out as a mason, but decided to change course after seeing so many machines on the sites: “I came to Colas as an apprentice and passed my CAP (craft certificate) as a machine operator in 1997.” In the beginning, he drove a loader, but decided to work with his father two years ago. “What I like most about this job is the great variety of landscapes that you see and the fact that you are constantly meeting new people. On a site, you get there, you see what’s going on, you do your job and leave: but it’s never monotonous!”

For the moment, David Le Strat is happy and wishes to continue at this pace. He’s ready to travel and why not even go abroad if the opportunity arises! “I love travelling: I go where work calls me.” When he’s not working, David drives other vehicles: quads, go-carts, jetskis. Meanwhile, his father works on his home and goes fishing. With the Le Strats, construction work is a family affair!
**Learning while you work**

Mathias Cazaux, waterproofing specialist, France

As a child, Mathias Cazaux never dreamed that he would one day work in the construction sector. This keen 30-year-old rugby player, who's been playing since he was eight, initially decided to become a baker. After his craft certificate and two years as an apprentice, he realised that the job was not for him. One of his relations, who was working for Smac Acieroid Toulouse, suggested that he join his team. And that is how Mathias began his new life. “In the beginning it was just a chance. But in the end, I was hired after starting out as an unskilled worker.” Mathias was offered a sandwich contract to obtain his craft certificate and technical school certificate in waterproofing. “It was a good way of learning and working at the same time.” He makes no secret of the fact that he stayed on because he loves working outdoors, in a team, and especially because it meant he had the opportunity of changing sites very often. “There are at least two of us in a team. Our role is to ensure that the construction is waterproof. The concrete base is covered with an undercoat on which a bituminous sheet is applied. We then lay a waterproofing compound and then two bituminous membranes that are welded together. That makes five stages in all.”

“Progress even more in my work!”

What are his immediate projects? “Progress even more in my work!” On weekends and one evening a week, Mathias joins his other high-powered team at the rugby club, where he trains and plays matches “to keep in shape.”

**The importance of contacts**

Philippe Barlier, foreman, France

Work in an office all day? No thanks! Philippe Barlier loves being outdoors and that is why he followed his father’s example. After obtaining his technical school certificate, he went to work at Colas in 1986. “In the beginning, I didn’t think I’d stay there for long, but I found that I liked the work. When you’ve tasted the joys of working outdoors, it’s hard to change,” he admits. He first began as an unskilled worker and then moved into offices where he worked on bills of quantities and site layouts, but he quickly returned to the field, where he finally became foreman seven years ago. “To do this job, you have to like working with people. We see a great number of people: the teams, clients, residents, and others.” Philippe hopes to become a site supervisor in the future, but he knows that the road will be long and tough: “When you start from the bottom of the ladder, you must know how to be patient, because there are a lot of highly qualified applicants. It’s important to do a lot of courses and prove your worth every day.” There is no doubt that with such infectious enthusiasm, this aficionado of two-wheeled vehicles, who spends his weekends riding either a motorbike or a bicycle, will reach his objective.

**A status-enhancing job**

Jean Maillard, grader operator, France

Jean Maillard started working in the public works sector soon after he finished his military service in 1972. The perspectives offered by Colas soon became clear. He worked as an excavator operator for two years, and then moved on to a grader which he still operates with the same pleasure as when he began, 30 years ago! He is modest but at the same time has a passion for his work, and he was one of the first to be awarded a ‘Losange d’or’ in 1993. “My work consists in taking part in all the stages of road construction.” What he likes most about this job is that every project is different. “From one assignment to another, I know that it will never be the same road or the same platform. With the grader, there is no such thing as routine.” Depending on the project, Jean works alone or in a team, which can comprise as many as fifteen people. “I’m very lucky to do a job that is really status-enhancing. Two other values that are found on all projects are willingness and respect for others. I’m inquisitive by nature, and I’m interested in everything that happens around the site.” Jean is very versatile. He is sometimes called upon to drive other machines, when the need arises: trucks, earth-moving equipment, backhoe loaders, cylinders, etc. There is also another experience which lasted twenty-five years and of which he has very fond memories: snow clearing on motorways, each winter, as part of a contract between Colas and Cofiroute. “It was a job that entailed being on standby. We had to be very responsive: we had to be on the bridge as soon as the snow started settling.” This machinery buff is so smitten that his wife wonders if she will have to buy him one when he retires.

“From one project to another, I know that it will never be the same road.”
Thirty years of service on the road...

José Magalhaes, compactor, France

José Magalhaes will have been working at Sotec for thirty years in April this year! This former farmer never intended to build roads, and yet when his brother-in-law asked him to work with him, he didn’t hesitate one minute. “I discovered a new job and learnt a lot of things. In the beginning, I was very versatile and did practically everything.”

versatile, I did practically everything and I gradually became specialised in the operation of the smaller rollers that you pass over the asphalt mix to compact it.” His mission is to make sure that the surface of the asphalt mix is perfectly even and that there is no trace of the machines that have passed over it. He continues to do this diligently and methodically, before going on a well-earned retirement in two years. “I already have a very packed timetable. I’m going to help my four children settle down in their new homes. You must never stop working if you don’t want to go rusty!”

José Magalhaes will have been working at Sacer for thirty years in April this year! This former farmer never intended to build roads, and yet when his brother-in-law asked him to work with him, he didn’t hesitate one minute.

“I discovered a new job and learnt a lot of things. In the beginning, I was very versatile and did practically everything.”

Always happy to help

Jean-Marc Pocheron, semi-trailer driver, France

Always available, and ready for new assignments, even the difficult ones. That is how Jean-Marc Pocheron sees his job. After a traineeship at Colas in 1982 as a raker, this former apprentice plumber ended up joining the company as a driver in Bourges, in 1988. “I started by driving a crane truck, and then a semi-trailer, a dump truck and then finally a flatbed,” recounts Jean-Marc, who joined the Châtellerault team this summer. “For the moment, I’m qualified for all transport in my new centre, which means I do a bit of everything. I work with asphalt mixes to supply the pavers, with the white teams, who come for limestone and aggregates. With the flatbed, I go round all the sites to collect and bring in the equipment.”

Jean-Marc prefers the contact with his co-workers. He has already carried out supervision courses where he has learnt to welcome and train young people and temporary staff. “My objective is to become a foreman. I know that to succeed, I must continue my training especially in topography.” He doesn’t rest when he gets home: “On weekends, I work on my house and in my garden. I do some odd jobs...something always needs doing!”

Working in a man’s world

Claudine Ménager, site supervisor, France

Claudine Ménager had always known that she would not follow the classical ‘female’ career path. Very early on, she turned towards civil engineering with a technical high school degree and then continued with a two-year technical diploma: “I love freedom. I love being outdoors and I’m more comfortable in a man’s world.” After eighteen months in a design department at TotalFinaElf, she went to work at Sacer in 1988. The company had already begun recruiting women, even then. She spent one year in the design department working on bills of quantities, and then two years as a foreman before moving on to her current position as site supervisor. “I already have a very packed timetable. I’m going to help my four children settle down in their new homes. You must never stop working if you don’t want to go rusty!”

Claudine has only one regret: the evolution of her work, which has become increasingly administrative, to the detriment of field work and human contact. “Today, I don’t have as much time as before to go to the sites, and I find it a pity because it gives you a better view of things. It is important to know the people on a project. If you give the same project to two different teams, you won’t obtain the same results. Some people are more at ease on one assignment than another and our role is to use our staff where they are more efficient.”

“The sites give you a better view of things.”

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A new acronym has appeared amongst the professionals of the construction sector: PPPs, which stands for Public Private Partnerships. What does it mean? In its broadest terms, it’s when a public body, wishing to build facilities or infrastructures and manage the associated public services, uses a private company for one or several different phases of the realisation: design, financing, construction, operation and maintenance, and service management. According to the legal system of each particular country, this concept, with its relatively wide scope, has different formulae often with rather obscure names. There is the concession formula, and also the METP (Public Works Corporate Contracts), DBFO (Design, Build, Finance, Operate), PFI (Private Finance Initiative), BOT (Build, Operate, Transfer), BOOT (Build, Own, Operate, Transfer), etc. PPPs can also be implemented in sectors as different as public buildings (prisons and universities), water, sewage treatment and of course, transport infrastructures: mass transit systems, bridges, roads and motorways, etc.

Why this new interest for such partnerships? Some of these partnerships are not such a recent idea. Public works concessions have been around for quite a while, even for many centuries: we often give the example of the Briare canal, which actually dates back to 1638! But many factors give the idea a contemporary feel. Throughout the world, there is considerable need for public infrastructures and their associated services. At the same time, governments and local authorities want to limit their public deficit, focus on their role and delegate more. As the Premier of Alberta, Canada put it: “do a lot more steering and a lot less rowing”. Finally, experience has showed that many public services can be managed by the private sector with more speed, more reactivity, more innovation and this saves money. More specifically, in the European Union, significant legal and regulatory modifications often question and ultimately change the previous practices of member countries (for example, the way toll motorway concessions are awarded in France). Above all, the European Union is getting ready to integrate, on average, ten more countries. To bring them up to European Union standards, they will need financing and construction of equipment and infrastructures: mass transit systems, bridges, roads and motorways, etc.

In Colas’ lines of business, which privatisation experiences do you consider the most promising? I don’t really like the term privatisation for roads; it’s too small and simplistic. Why? Firstly, because roads have to be an almost totally public infrastructure. Recently, the World Bank published a “Road toolkit” which lists the different formulae of Public Private Partnerships. This document shows that in a contract between public and private bodies, the cursor between the two can move, but the public aspect never disappears and the public authority always controls the system, whatever it may be, so that the very principles of the public service are respected. Also, even the concept of completely private financing (the BOT idea, with no public participation) has run into difficulties. The number of roads where you can expect 10,000 vehicles per day (that’s a minimum!), with drivers willing to pay 5-10 cents of a euro per kilometre (i.e., the equivalent cost in gas for a private car!), in a country with a stable and adapted legal environment, is not very high! In other words, some kind of public subsidy is necessary, and the implementation of this subsidy depends on the circumstances, which leads to Public Private Partnerships.

Regarding roads, shouldn’t there be a distinction between the larger projects and the more traditional maintenance and resurfacing works? Because of their size and financial importance, larger projects pose two key questions. Firstly, who is going to pay? The user – if he accepts? The taxpayer? Or a bit of both? If it’s the taxpayer, should it be through traditional or differed budgetary financing? Secondly question: how do you guarantee the sustainability of the system? Long-term budgetary financing is always weakened by the impossibility of maintaining the earmarked financing itself. All this must be taken into account.

In my opinion, the projects which have “worked” are firstly those where predictions for the infrastructure in question were reliable and this is quite rare, then those projects where the stability of their legal and financial situation is guaranteed.The French government’s reflections on transport should lead to the possibility of developing and launching new types of Public Private Partnerships (PPPs), with the aim to deliver quality public services. Michel Démarre, adviser to the Chairman of the Colas Group for International Affairs, shares his opinions.
I'm not surprised that in the concession system currently applied in France, the government subsidizes 50% or more of the initial investment. Those who criticise this system forget to take into account the maintenance and operational costs for the remaining duration of the concession; those costs are not subsidised in any way. So, as a proportion of the total cost, the initial subsidy is not so important. In this respect, I think that systems using long-term budgetary financing are more fragile. This is overlooked in documents prepared by the European Commission on transport infrastructure charging; they do not provide any guarantee that the possible additional financing will actually go to the transport sector! There are similar fears in France regarding the privatisation of the motorway concession companies: once the government has relinquished the dividends of these companies, where will the money come from for transport in general and, more particularly, the roads?

PPPs seem better adapted for building new roads than the maintenance of existing roads. Do you agree? Not at all. Using similar principles, we could design contract schemes associating road authorities and road construction companies and which would be more efficient. It may be a paradox, but I think that this is where we find the greatest potential savings for public authorities. Again, examples of this kind of innovation are not rare overseas: in the United Kingdom and Alberta, Canada for Colas' experiences, road authorities have drawn up innovative maintenance contracts over the last ten years, in various forms but all with two essential characteristics: they are long-term contracts and contracts which create a kind of partnership between the road authority and the contractor, e.g. for work planning and programming. In 2002, on a trial basis, the World Bank published specifications for long-term performance contracts for the maintenance and management of roads in developing countries; the EBRD (European Bank of Reconstruction and Development) is preparing long-term maintenance concessions in European Union candidate countries. Considering these two facts, I regret the conformity of road authorities in France.

In France, why are road authorities so reticent when it comes to PPPs applied to maintenance operations? There are several possible reasons: legal (differed payment is prohibited in France) and financial (to avoid formulae which would excessively increase public deficit). But I think that the main reason is a lack of evaluation of public policies. Have we ever measured the cost of administrative procedures, repeated every year, for managing maintenance work? Or the cost of not meeting quality standards, through a late or out of season project launch, which is often caused by the administrative procedures? Is it reasonable to entrust civil servants with these elementary tasks when most other public works? Or the core responsibility of road authorities: the search for lasting financing methods, the planning and organisation of a delegation system towards the private sector? I have just returned from Washington, where I attended a progress report given by a study group of American decision-makers who came to Europe to witness the systems which guarantee the performance of maintenance contracts. The group went to the United Kingdom, Germany, Denmark, Sweden and Spain... but not France! It's such a shame. I hope that the transport audit, launched by the French government, and the debates on decentralisation will lead to a real need for new transport directions and planning. Above all, I also hope this will pave the way for different PPP formulae for what they really are tools in the "toolbox" of national and local decision-makers, giving them the possibility to experiment with new ideas, traceably and transparently, to improve the quality and performance of public services.

In collaboration with the Public Private Infrastructure Advisory Facility (PPIAF), the World Bank issued in 2002 a "Road Toolkit" for public-private partnership (PPP) in highways. This initiative deals with the Bank's aim of becoming increasingly a knowledge Bank, sharing with its clients its worldwide experience and best practices. In addition to its task of lending money to developing countries for a variety of projects, the World Bank undertakes to advise its clients' governments on how to organize and administer sectors of their economy.

A guide for PPP in developing countries: the "Road Toolkit" is to help the Bank's clients set up legislative, regulatory and administrative arrangements to engage the private sector in road development, management, maintenance, operation and financing. Not only is the toolkit based on the Bank's experience as a donor organization for a variety of projects, the Bank issued sample standard bidding documents in this regard, the World Bank has long emphasised the role of competition, innovation and financial accountability. By contracting with private entities it is the best way to enhance efficiency of a public organization. To help its client countries in this regard, the World Bank issues primarily standard bidding documents along with various types of technical papers and recommendations. In 2002, the Bank issued sample standard bidding documents for long-term performance based management and maintenance of roads.
Ann Hindry is a historian and art critic. She’s also curator of the Renault modern art collection since 1996. It is a legendary collection and she does all she can to bring it to life within the company. She works hard for the collection and its reputation.

**Ann Hindry: a look at the link between art and the company**

**You’ve been a member of the Colas Foundation for three years now. What do you think of the idea behind the Foundation’s action?**

What I like about the Colas Foundation is its independence and sincerity. It is a very personal undertaking, which is far removed from all mercantile considerations and fashion trends, and is mainly driven by a love for art. That is what makes it so original and so authentic.

**What reflections does the Colas Foundation collection inspire in you?**

It is a very attractive collection, which is testimony to its openness. The Foundation contacts artists of all horizons who are selected only by their works. The principle of the single, imposed subject is not a hindrance because the road theme covers a very wide range of perspectives. This collection is also mainly focused on painting, which makes it very coherent.

**How do you give the Renault modern art collection a new lease of life?**

When I took over the job, the collection had been dormant. I therefore launched an in-house familiarisation campaign, based on visits, conferences and many other events. I had to bring the collection alive again inside the company and in the imagination of the men and women working at Renault. I therefore worked at ‘rehabilitating’ it, so to speak, and I can see today, to my satisfaction, that “Renault people” love “their collection”. Thus, the collection has gradually become a trait of the company’s profile. Aside from their life inside the company, the works are also intended to be exhibited outside, and that is a large part of my work. The Renault Workshop, on the Champs-Elysées, will soon be hosting a Vasarely exhibition. In particular, the collection is often requested for major exhibitions by prestigious museums in France and abroad (the next one will be in Tokyo).

In your opinion, what role should private patronage play in art? Is the relationship between art and the company a simple one?

Private patronage works very well in Germany and in the United States, and maybe a bit less in the United Kingdom. It is true that in France the position of the government in the field of art is rather heavy and more encouragement should be given to private initiatives. However, the public sector, through the example of the national contemporary art fund and regional funds (FRAC) have initiated a lot of noteworthy actions, that are really aimed at opening out art. As for the relationship between art and the company, it is a complex one and deserves to be treated in more depth. The company has replaced the Church and the government in its function as patron, and yet the company’s time does not fall in with the time of art. A corporate collection is always the story of one person. When the initiator leaves the company, the problem of carrying on the collection is raised.

**Have you seen the Stämpfli exhibition, organised at the Jeu de Paume national gallery in Paris and sponsored by Colas?**

It is a very beautiful exhibition, which pays a fitting tribute to this great artist of the pop art movement. The Colas Foundation has taken an excellent initiative, totally in line with its patronage policy and its pet theme: the road.
On the road of art

Every year since it was created in 1991, the Colas Foundation has selected about fifteen artists who are commissioned to do a work on the theme of the road.

The jury of the Colas Foundation is made up of five Group employees, C.E.O. Alain Dupont, who is a permanent member, and a further six personalities from outside the company (journalists, curators, historians, etc.). The Foundation team is changed regularly. Last autumn, it met to choose the winning artists for the 2002 selection. It had received over 200 applications. The fourteen painters selected from different countries were each commissioned to do a painting on the theme of roads. “They have to imagine the roads of today and tomorrow, and then paint them,” explains Group C.E.O. Alain Dupont, creator of the Foundation.

Over the years, the collection has acquired original works that reflect current painting trends. Today, it comprises 136 paintings that are exhibited in the offices and lobbies of the Group’s head office and subsidiaries, in France and abroad. The paintings thus move from one subsidiary to another and from country to country. The entire collection was first shown to the public in June 2001, in the Palais des Congrès in Paris, during the World Congress on roads. The artists are currently at work; they must hand in their paintings to the Foundation by the end of the first quarter of 2003. There will be a private viewing of the year’s selection at the Group’s head office. Last year’s presentation of works acquired, in June 2001, was attended by 400 people; it was a great success, receiving wide media coverage.

The Foundation was awarded the French Oscar for Corporate Patronage in 1992 and does not only aim at supporting artistic talent and bringing together two worlds that transport people – art and the road. It also wants the richness of the collection to be a mirror of the Group’s cultural and social diversity. As Alain Dupont declares, “each employee should be able to find his or her reflection in the works that are created.”
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