In the beginning man invented the wheel. But he did not know what to do with it, for it stuck in the sands of summer and the muds of winter; it caught in cracks and jammed in rocks. In other words, man soon realized that he would have to smooth out the paths he traveled. That he would have to change the lie of the land – at least in the places it was most impassable – into a support for carrying his vehicles. So, without fully realizing what he was doing, man began to build roads. The emergence of the automobile then changed the issue from one of a mere support to one of interface between wheels and the ground. At about the same time, however, the question was resolved by the near-simultaneous invention of the tire and Cold
Asphalt (Colas) bitumen emulsion. In their wake came mixing and coating techniques.

Colas and its brands have gone on to produce and develop a breathtaking range of products, which we are proud to be able to offer our customers.

The automobile has now become the most widely-spread social – in the etymological sense of the word – means of transport. It ensures 80% of private travel in Europe and over 95% in North America. Moreover, more than 80% of goods worldwide are transported by road.

The automobile also embodies the fantasies of many a man and woman. Dreams of motion and possession have come true. The automobile is indeed the stuff of our dreams. It has helped us fulfill them and turn them into reality on a daily basis.

It is for this reason that we feel such pride in our business as builders of roads. For roads give us the freedom to come and go and to share our experiences with other. They lead us to true independence.

"Roads gives us the freedom to come and go and to share our experience."

To kill off roads would be to kill off the car and banish for good the few dreams left to us today. Automobile constructors, oil companies and tire makers are, in their own fields, unstinting in their efforts to make their products increasingly recyclable and clean.

Admittedly, the car still causes pollution. But all forecasts show this pollution is gradually abating. So the automobile market is set to go on growing, and with it, the construction of roads which contribute to human development.

It is for this reason that I am able to state with certainty that Colas is well positioned in an industry which has a long future stretching ahead of it.
LATITUDE / LONGITUDE
From Mont-Saint-Michel to Mayotte, from Djibouti to Melanes... snapshots of Colas expertise round the world.

DIRECTIONS
Drivers
• Management, methods, markets... what’s changing at Colas round the world.

Backward glance
• How potash mines on the downswing were turned into an urban development zone.

In depth
• USA: Colas celebrates 35 years of activity in North America.

Indicators
• The Colas Group’s 127 sites produce over one million metric tons of binder.

ITINERARIES
Working behind the scenes or in the spotlight, these are the men and women who make the Colas Group what it is today.

INTERSECTIONS
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To prevent storms and high tides from flooding the wet pasture land along the Channel coast, Colas Nord-Picardie has strengthened the dike at Bas-Champs between Ault and Cayeux in the Somme Department in northern France. Everyday, trucks ferry 3,600 tonnes of pebbles from a beach eight kilometers further north. The pebbles are placed in boxes arranged along the shoreline in zigzag rows tens of meters deep which advance into the sea. They are made of metal sheet pile crowned with concrete. Every year, work is suspended during the summer and resumes in October. Autumn storms often fill the excavated part of the bar back in overnight, sucking the pebbles from their boxes and sweeping them out to sea, as the sea seeks to reclaim its sovereignty in the never-ending struggle between man and nature.

**Recycling with Stabicol binder**

Last autumn Sorocram performed its first reinforcement job using a grave stabicol. The stretch of road used for this pilot test was on the DN41, 50 kilometers south of Bucharest. It ushered in a new phase in innovative techniques for rehabilitating the Romanian road network. The group mustered a wide range of expertise, encompassing formula design by Central Research Laboratory, pavement design by R&D and reconfiguration of the mill loaned by Colas Midi-Méditerranée. Colas Austria's technical know-how and experience was also required to support the work of the Sorocram team. Following the preparatory work of curb removal and lay-out correction, a three-kilometer stretch was treated. After milling, a 14-centimeter base course mix was reconstituted using a Stabicol binder plus added corrective material. A binder course and a wearing course were then laid. The success of the pilot project means the technique could be developed on a wider scale. A 50,000 square meter jobsite is scheduled for the spring.
250,000 m$^3$ of earthworks in 70 days

Only a few weeks before the Italian-built Meknes-to-Khemisset highway was due to be opened to traffic, layers of clay some 20 meters below the natural contour triggered a landslide which caused damage to part of the highway’s highest embankment.

Specialists from the public design and testing office advocated buttressing the embankment with rip-rap abutment topped by a counterweight. This approach made it possible to treat the collapsed section only. But it also meant that the team from GTR – the Group’s Moroccan subsidiary in charge of the jobsite – had to work in a confined area.

This major earthworks job involved 45,000 m$^3$ of rip-rap, 50,000 m$^3$ of excavation cut, along with 150,000 m$^3$ of cut and fill and 700 meters of pavement.

The work was completed in 70 days. For half of that time the team worked round the clock, completing 9,000 m$^3$ of cut and fill daily.

Once the mixes had been laid, the last few hours were given over to landscaping – topsoil was brought in, road markings painted and drainage, traffic signs and safety rails installed.

The completed job was handed over to the customer, Autoroutes du Maroc, barely two hours before its official opening.
A jobsite on the Loire River at Dampierre-en-Burly

As part of the renewal of its order authorizing the nuclear power plant at Dampierre-en-Burly to draw water from and reject it into the Loire River, the Loiret department’s infrastructures office asked the plant authorities to build two fish passes and one boat pass across the existing threshold. The decision to build the three structures was the result of wide-ranging consultation between, EDF, the French national electricity company, government agencies and associations of fishing and boating enthusiasts, as required by the Loire river grandeur nature environmental scheme. A Colas Centre-Ouest subsidiary, Meunier, was awarded the contract for earthworks and rip-rap. It completed the work during the summer of 1998, when the Loire River was at its low water mark. The jobsite required 15,000 tonnes of pit run material to build dikes to enable teams to dry-work. Some 7,000 tonnes of sandstone block were painstakingly put in place and sealed in concrete to build the rip-rap thresholds on both banks of the river. On the left bank, two concrete slopes allowed flat-bottomed crafts of up to five tonnes to pass without the help of a winch. Meunier completed the project within the imperative four-month timeframe before the waters returned to restake their claim.
Djibouti modernizes its infrastructure

Gone are the potholes, the cracks, the clouds of dust and the puddles El Nino left in its wake. The streets of Djibouti have been rejuvenated. As part of an international cooperation agreement between Japan and Djibouti, the Japanese International Cooperation Agency (JICA) donated an aid package to Djibouti. As a result, Colas Djibouti was subcontracted by the Japanese company DNC to renovate a portion of the RN2 road between the sea port and airport. The 8.5 km stretch of road runs through downtown Djibouti, serving the Croix de la Lorraine and rail station traffic circles. The 30 million French franc project was completed between May and December 1998, its scale requiring additional human and material resources. Synergy between Colas Indian Ocean offices provided Colas Djibouti with the extra capacity. The jobsite involved applying 25,000 tonnes of hot mix and 17 kilometers of curb to make the city’s roadways and sidewalks more modern and durable.

A43, the final stages

Colas Rhône-Alpes has been awarded the contract for building the final 13-kilometer stretch of highway A43 between St. Michel-de-Maurienne and the Fréjus tunnel in southeast France. The job is scheduled to last two years, the time it took to complete the first 50 kilometers. This lengthy timeframe is due to the road’s complex layout and the many bridges, tunnels and structures along the way. It is in fact one of Europe’s most complex jobsites. The highway is seen as an economic windfall by the people of the valley of La Maurienne, often overlooked by holiday-makers. Not only will it bring the ski resorts of La Maurienne closer to the major French and Italian roads, people will also be able to get to Val-Thorens by ski-lift from the valley. The major ski area at Trois Valls will only be 45 minutes from Chambéry instead of the one-and-a-half hours it currently takes by road. A grouping of contractors will join forces on the contract which will generate sales of 66 million French francs. Some 120,000 tonnes of mix will be laid, part of it on viaducts and tunnels.
RN7 reinforced between Dosso and Sabongari

For more than a year now, Colas teams in Niger have been reinforcing part of the RN7 road between Dosso and Sabongari. With sand storms and temperatures of around 45°C, weather conditions have been gruelling. The RN7 is the main arterial road between the capital, Niamey, and neighboring Benin. The job entails overlaying the existing pavement course with 12 centimeters of laterite and double surface dressing. The 80-kilometer jobsite is 90% funded by the African Development Bank, with the Niger government supplying the remaining 10%. The main difficulty lies in supply management. Water has to be fetched from a source 130 kilometers away from the jobsite’s halfway point, while the materials and aggregates required for surfacing come from 150 kilometers away. As for consumables like oil, gas, diesel fuel and bitumen, they are brought in from the Ivory Coast – a distance of 1,600 kilometers.

Somaro at work over TGV in complete safety

To ensure absolute safety for its teams installing a heavy-duty safety barrier on a bridge over the TGV track at Tarascon in southeast France, the Structures Department at Somaro’s Midi-Méditerranée offices designed a gantry. It took two months to carry out preparatory work for the jobsite and draw up all the quality assurance specifications. The gantry’s prime role is to prevent men and equipment from falling. It has also been designed as an effective operational platform, enabling teams to remove existing safety structures and carry out formwork. The teams are fed the cement they need by a specially designed hopper which ferries cement and makes it easier to pour into forms. The gantry is 12 meters long and moves along the bridge deck on a track. Purpose-built for railroad jobs, it allows the installation of heavy-duty BN1 and BN2 safety barriers with no inconvenience either for road traffic crossing over bridges or for trains passing under them.
SMEC lays underwater cables in Mayotte

Over the last six years, electricity consumption has increased by some 20% per year on Mayotte, one of the Comoro Islands in the Indian Ocean. Reinforcement of production and distribution resources was therefore vital. It was against this backdrop that SMEC, a subsidiary of Colas Mayotte, secured a contract from Electricité de Mayotte for laying three undersea cables – two power cables and one fiber optic cable.

Before it began digging the 8,000 meters of trench, SMEC requested seabed reconnaissance to plot the best route, i.e. the one with the least obstacles. The seabed varies in depth from 16 to 25 meters and is made up of mud, coral growths and sand. The cables stretch for over 4,700 meters from Pendu beach on Grande Terre to Badamiers beach on Petite Terre. Each one comprises three sections. It was therefore necessary to join them underwater. The cables were fed into sheaths, then laid on the seabed in channels 50 meters wide, before being connected to power generation facilities.

The need to ensure absolute watertightness made this phase of the job particularly technical and painstaking. Each time a cable section was laid, divers swam down to check that the sheaths had been properly placed in the trenches. To help the SMEC teams complete the job successfully, the Mayotte maritime transport company provided them with a floating platform. Tugs on either side of the platform maneuvered and steered it in accordance with GPS bearings.
Lille's east ring road completed after 10 years of work

When Lille's new business district, Euralille, was built in 1998, it was decided to double the width of the city's eastern ring road to ease congestion at its southern point of entry. The job involved laying 3.5 kilometers of roadway, an interchange and viaducts over railway lines. Some 10 years and 1.7 billion francs later, the project is now under completion. The funding came from France's regional development plan, the regional authorities and the Lille city council. Sreg's and Colas' Nord-Picardie subsidiaries joined forces to play an active part in this major project. For the entire duration of work, the road was kept open to traffic, generally considered to be among the heaviest in France.

Sreg Nord-Picardie's Lille branch manages the grouping. "The jobsite consists of bridges and viaducts with five lanes in either direction," says branch director Daniel Régnier. "The roadway is wide and the jobsite extends over 1,700 meters." Teams have laid 15,000 tonnes of asphaltic overlay and 65,000 tonnes of road base asphalt. Colas Nord-Picardie's Lille office was involved in several aspects of the job. It helped make the A1 highway south of Lille into a two-by-five lane highway, which was then linked to the existing ring road by opening a temporary access road. It also laid a Colclair surface on Flanders Bridge as well as several layers of pavement course. The branch is currently building a roadway at Lille's southern entry point. This 20 million franc job, carried out under traffic, will redirect all traffic onto the new ring road.
To reduce nuisance and noise levels for frontagers when it laid power lines in Geneva, Colas Switzerland’s subsidiary, Jean Piasio, used a no-dig process called cracking. Never before used in Switzerland, this technique cuts noise levels and pollution. It also reduces the amounts of cut and fill that need to be transported by up to 90%.

The method consists of taking an existing water pipe made of friable material and cracking it into pieces while simultaneously replacing it either with a protective casing which will house the new pipe or with the new PVC sewer.

The first step is to make two openings in the ground about 100 meters from each other. A machine comprising a metal cylinder and hammerhead is connected to a winch which controls recoil caused by the impact of the piston on the hammerhead.

A compressor acts on the piston which propels the machine along the pipeline. The rear of the machine compresses earth to widen the diameter of the hole. This allows the teams to slide in the casing which is to house the new pipeline.

The advantage of this method is that there is no need to dig additional holes in an often cluttered subsoil. Piasio’s teams have now replaced a 150 mm pipeline over a length of 1,500 meters for Geneva’s industrial facilities management office.

Spac, Screg and Somaro in Mont-Saint-Michel bay

The organization which represents mussel-farmers from the towns around the Mont-Saint-Michel bay has had a new 22,000 m² mussel-treatment platform built. The new platform was part of work to extend facilities and bring them into conformity with European legislation.

It was made of sea concrete so as to withstand harsh weather of all kinds. Sea concrete ensured a stable pavement structure in spite of the silty nature of the ground and shallow-lying groundwater. Spac subsidiary, La Suburbaine, was awarded the 35 million franc contract. It subcontracted laying of the concrete to Saba, a subsidiary of Somaro which specializes in concrete work. A slip form machine produced a 20 centimeter slab of concrete reinforced by polypropylene fiber. The machine advanced at a speed of 1.5 meters per minute. It produced strips five meters wide swept sideways for better grip. Screg Ouest built most of the access lanes. Tides and the nature of the ground meant pavements had to be built on very thick, porous sub-base layers. The asphalt wearing courses were surfaced with a chipped surface dressing.
**IVORY COAST**

**Colas Ivory Coast renovates 285 km of country roads**
The latest challenge that Colas Ivory Coast's teams have had to face has been the renovation of 285 km of country roads regularly deteriorated by heavy rains. What's more, these roadways are located in the region of the Eighteen Mountains, where some slopes have gradients of over 30%. Add to this the fact that the region – in the center-west of the country 650 kilometers from capital Abidjan – is covered in luxuriant vegetation, and it becomes easier to gauge the scale of the job.

Funding has come from the African Development Bank.

The main difficulty posed by a jobsite which straggles over 200 kilometers has been to put in place the right logistics: workshops have had to be set up and closed down fast, teams moved every two weeks, and the management team must remain proactive. Logistics have proved tough, but local people have been cooperative. They have been relieved that they will soon be able to take their farm produce to market. The jobsite got underway in February 1998, right in the middle of the drought season. Waterholes were dry and there was rationing. But there was also the ordeal of the rainy season to cope with.
A year's work has seen 2,400,000 m² of dense forest cleared and 450,000 m³ of earthworks completed.
A quarry also had to be dug in the region to produce aggregate for concrete while a pipe precasting unit was set up to lay 240 drainage pipes.

**UNITED KINGDOM**

**Colas Ltd. wins five-year road servicing contract**
The East Sussex county authorities have awarded Colas Ltd. a five-year contract for the upkeep of its roads, winter roadworks and the servicing of its fleet of vehicles. The contract will generate annual sales of £5 million. Under the terms of this partnership contract – an increasingly common arrangement in the UK – over 90 county workers were transferred to the Colas Ltd. subsidiary, Colas Highway Services, when the contract was signed on September 1, 1998. The contract also commits East Sussex and Colas Ltd. to a number of targets and sets out an operational procedure. The two parties must seek to make the best use of money available and share equally any savings made. The customer will plough savings back into the contract, so boosting business. In this way, East Sussex has supplied Colas with new business opportunities. The team has clinched its first successes with a contract for servicing all Brighton and Hove's council vehicles and improving landscaping for Eastbourne Borough council.
Seven Coletanche-sealed catchment basins on the A75

Colas Midi-Méditerranée’s Rodez branch office began work in December 1998 on the water catchment basins built into the Sévérac-le-Château bypass on the A75 highway in southwest France. The contract, worth two billion francs, provides for the construction of seven leakproof basins, comprising a total surface area of 20,000 m². The leakproof membrane the team have opted for is elastomer-bitumen Coletanche NTP ES. It ensures the natural resources full protection by catching and holding runoff water which can include substances like mud, oil or toxins. Teams constantly monitor the membrane’s weldspots using a Colas-built machine, CAC94. This unique approach provides a guarantee that the membranes are leakproof at each and every weldspot. And it ensures that natural resources in this naturally unspoiled region will not be adversely affected by highway pollution.
Runway site proves to be a runaway success

It’s midnight on the runway of Le Raizet airport at Pointe-à-Pitre, Guadeloupe. Weather conditions are good. The site teams are ready and waiting in a parking lot the south of the airport. As soon as the last jumbo for Cayenne takes off, a call to the control tower confirms that the runway is completely free. The green light is given for the night’s work to commence, and the long hot in place recycling train is slowly set in motion, taking up its station under the dark night sky.
You don't make changes to a winning team... and nor do you change a successful supplier. "The last time the runway was resurfaced was in 1979, which must make it a record for longevity," says Daniel Bonnet, general manager of Guadeloupe's Le Raizet airport. "The job was done by Colas back then. This time around, it was still Colas who offered us the best solution, both in technical and financial terms." But the past twenty years have seen considerable development in methods. This time, Colas Guadeloupe has chosen to repave the runway using hot in place recycling.

BREAKING UP IS NOT SO HARD TO DO

It's 1 a.m. As soon as the airport authorities give the all clear, a planing machine on loan from Colas Sud-Ouest's Novacol train is at work, attacking the first four centimeters of asphalt. Behind it, slowly advancing, follows the hot in place recycling train, some one hundred meters long overall, consisting of preheaters, a mill, a mixer and a paver.

At the head of the convoy, the five preheaters are beginning to process a strip 900 meters long and 3.75 meters wide. The heat of the surface gradually builds up – 70°C, 100°C, 150°C – and it is then possible to break up the asphalt. This operation is carried out by the hot in place recycling train, which, using a fixed central drum and two extendable side drums, breaks up all the processed materials and brings them to the center. These are mixed with regenerating binder; then laid with the floating screed of a conventional paver.

"The current surface is very badly cracked and so water gets in and gets trapped," reports Philippe Leyendecker, head of equipment at Colas Guadeloupe. "When you heat it, even though the asphalt is only processed to a depth of seven centimeters,
vapor from the water tends to hold back our advance and slow down the increase in temperature.” It therefore takes nearly six hours of daily progress to heat and then unstick a strip 900 meters long.

Here in Guadeloupe, the technique of hot in place recycling is fully justified. It enables materials to be processed in situ, by bonding the heat-recycled layer to the base course.

FROM ASPHALT TO PAINTING

By 7 o’clock in the morning, the planer, preheaters and hot in place recycling train have all finished their night’s work. The equipment is gradually withdrawn as the men take a break over a bite of food. Half an hour later, all the machines have been removed with the help of three low-loaders. They can now rest until midnight, the next night.

As soon as day breaks, the pavers come out. This year, asphalt surface – aeronautical asphaltic concrete – is being laid to a depth of four centimeters. A general overlay of the runway is scheduled for next year.

At around 8 o’clock, the painting teams are ready to take over, and shortly after them, the sweepers are in action.

The only slight snag in this otherwise flawless operation is the slow cooling of the asphalt mix. “The airport authority offered us the services of a team of firefighters armed with fire hoses to try to speed up the cooling process, but things are not quite that bad,” laughs Jacques Austernaud, general manager of Colas Guadeloupe. “We prefer to allow ourselves a margin of two extra hours.”
SEVEN HOURS’ WORK EACH NIGHT

The nighttime operation is repeated for twenty-four nights over a period of seven weeks. Work could not be programmed for Tuesday or Saturday nights because of two scheduled arrivals – a cargo flight at night and a passenger 747 in the morning – for which no alternative time slots could be found.

The assignment for the Guadeloupe subsidiary consists in repaving the central portion of the runway, thirty meters wide, over a length of 2,600 meters. “It’s on the central portion that movement of jumbo jets is concentrated,” explains the airport authority’s Daniel Bonnet. “The runway has deteriorated mainly because of the steady increase in the use of these kind of aircraft in the past twenty years.”

The site has been carried out in a series of 900 meter-long strips, with the teams able to complete one strip per night. The two outer strips are 4.5 meters wide, and the six inner strips 3.8 meters wide. This allows for a 10 centimeter overlap at each side.

There are more than 40 people on the site, almost one half of the subsidiary’s total workforce. “The hot in place recycling process is genuine team work. Everything has to work like clockwork. You put it all together and take it apart as if it were a Lego set. Each part of the process has a direct effect on the next part,” remarks site manager Philippe Lappert.

Adds Caroline Chardonnet, who heads both the technical and communications de-
The teams complete a 900-meter long strip each night.

very good thing. Now that we've worked in Morocco and Guadeloupe, we're ready to go on a world tour!"

Every evening, as the site teams begin work, the airport's meteorological service provides a detailed weather forecast for midnight, and this information is updated at regular intervals through the night, thanks to radar checks performed every half-hour. With such details available, all the teams are able to take the precautions that are necessary for their operations.

STRINGENT SECURITY CONDITIONS

Access to the site is strictly restricted. Everybody wears a badge, and a guard checks all the comings and goings. Why such high security? Because during the night, the airport continues to operate for light aircraft, which use the 1,300 meters of runway still available, but tend to fly very close over the teams at work.

Now it's half-past twelve, and the sun is at its height. The rest of the island is taking its lunch break, but at the airport, traffic is ready to begin again. All the road making equipment is neatly arranged in the parking lot close to the Jarry asphalt plant. The men can go home for a well-earned rest. See you tonight, guys!
Alterra constructs a leisure center and spa

By delivering two major projects – a leisure center and a spa complex – just six months apart, the Group’s East European pipe-laying subsidiary, Alterra, has made a key contribution to the economic development of the Hungarian town of Tiszaujvaros, situated 200 kilometers east of Budapest.

In July 1998, the leisure center opened its doors for the first time. In no time at all, more than 4,000 men, women and children were jostling to get in. The news spread by word of mouth, and people were soon traveling a hundred kilometers to try it for themselves. Some even crossed international borders!

And then a mere six months later, in January 1999, the spa opened, for an older clientele of rheumatic sufferers. The opening met with no less success. In just twelve months of work, Alterra had produced two high-quality projects.

RAPID DEADLINES, TECHNICAL PROWESS

“This type of jobsite is very rare for us,” the Tiszaujvaros work center manager, Jozsef Grubicza, is proud to declare. “It came...”
about as the result of many long years of work in the town.”

The jobsite, which was carried out in two phases, was rare in more ways than one, as Alterra constructed first a leisure center, then a spa on a single fifteen-acre site.

The first project, handed over in July, consisted of three pools, one specially for small children, and the other two with features such as wave machines, slides and a stream with a current. The water of the pools is heated by warm water from nearby natural springs.

The second, completed this January, is a spa complex (something of a Magyar specialty), with inter-connecting indoor and outdoor pools, saunas, hydromassage stations, etc. The water supplied to the pools comes from hot springs, pumped and diverted from nearby sources.

**DAY, NIGHT AND WEEKEND**

Each of the two phases constituted a contract worth €600 million Hungarian forints. With the exception of the concrete structures, produced by Alterra in its local concrete plant, the subsidiary, acting as prime contractor for both projects, contracted the construction of the buildings themselves to a number of subcontractors. In total, the projects represent three kilometers of pipes which criss-cross beneath a surface of 1,300 m² of water. The complex work was accomplished in less than a year, under difficult weather conditions.

After a gloomy start to the summer, the rain began falling unrelenting in the sec-
Each site constituted a contract worth 600 million Hungarian forints.

...ond half of August. It became necessary to extend working hours, both weekdays and weekends, to make sure that the complex was watertight before the first snowfalls, expected in mid-November.

In Hungary, people are not afraid of working long hours. Because their work time is reckoned on an annual basis, they are allowed to put in heavy weeks of 60 hours, knowing they will be able to recuperate afterwards. "The men thoroughly understood our problem," confirms Grabics. "They knew that they would get a much quieter spring!" But beyond the issue of working hours, the men were extremely proud to be involved in a project of this kind, and were determined to surpass themselves: "As a rule, most of the company's work consists in laying underground pipes. Here, for the first time, we were working in public, and, what was more, actually for the public! At last, our men had the chance to show relatives and friends the kind of work they do. After this experience, we had a hard time persuading them to 'go underground' again on the next job!"

Working fast is one thing, but working well, without taking risks, is another. At Alterra, safety forms part of the company's culture. "We are aware that there is still a lot of progress to be made for our men to become even more conscious of safety issues," admits general manager Szabolcs Sido. He has

**PORTRAIT**

Bela Juhasz, eastern region area manager at Debrecen

Bela Juhasz has faith in the development of business in his region, just as he is confident that his country will enjoy rapid growth. Bela joined the company young, at age 18, back in 1964, maintaining equipment in the workshop. Meanwhile, he trained as a mechanical engineer. "In the 60s there were not many young people able to complete long years of studies without doing a paid job at the same time. You had to be really motivated to complete your studies and hold down a job. But when you could do so, you could derive a lot of benefit." A few years later, after his engineering diploma, Bela became head of the workshop, and then deputy to the head of the work center. In this position, he concentrated most of his attention on developing mains and civil engineering business in connection with the town's chemicals plant. Today, as regional manager, Bela Juhasz knows his zone perfectly, has thorough understanding of technology, and knows the potential of his men. "I know exactly what I can and can't ask someone to do," he says. "It saves a lot of time!" He is fascinated by both the technical and management sides of his job, and appreciates the diversity of his assignments. "Every day brings a new challenge!" he laughs. As regards the future, he believes Hungary has already come a long way. There are many prospects for economic development. "It's up to all Hungarians to forge ahead, but avoid making mistakes!"
therefore put a no-nonsense safety organization in place. A safety manager patrols the country, and visits jobsites unannounced. Once he is there, he checks up on safety conditions and hands out advice on implementing safety procedures on-site. With each month’s salary, site foremen receive a bonus providing they satisfy dual criteria indissociable: achieving targets and zero accidents. “There’s no better way on earth of motivating people,” smiles Sido.

CONVERTING A FORMER INDUSTRIAL ZONE

The birthplace of a vast Hungarian chemicals complex extending over 20 km², Tiszaujvaros mushroomed during the 1950s. At the time, it needed to house some 30,000 people, whose livings depended directly or indirectly on the chemicals industry. In the early 1990s, the new political regime gave the inhabitants wings, and many preferred to move away from this employment catchment area to the central and western regions of the country. To counter this massive exodus, the town council and local authorities are striving to transform the urban industrial zone, with the objective of making Tiszaujvaros into a full-fledged regional urban center with the creation of numerous job opportunities. With this plan in mind, the town council has already made land available to potential investors, and the construction of apartment blocks has been stopped, with large middle-class homes being built instead. The leisure sector is a fundamental part of this redevelopment program, and there are many projects intended to attract new visitors.

“These two projects will really provide Alterra with prestige references,” remarks Bela Juhasz, area manager for the eastern region of the country. “They will be enormously helpful to us in developing our customer portfolio over the next few years.”

While the town of Tiszaujvaros has now successfully forged itself a strong new identity on a regional level, there is still a need for improved accessibility from the capital city, Budapest. Economic development will be largely conditioned by the construction of motorways. The Group’s road building subsidiaries in Hungary, such as Egut, are in the running. But for the moment, owing to a low level of funding for road and motorway construction, a large number of projects have yet to get off the ground.
Jozsef Grubicza, Tiszaújvaros work center manager

Exactly like his boss, Bela Juhasz, Jozsef Grubicza started out by combining a paid job in the company with eight years of engineering studies. This type of practice is becoming less common, because the country has recognized its need for highly qualified people in its workforce, and now often offers financial help to students. During his more than 20 years at Alterra, Jozsef has observed the changes his industry has undergone with much interest. “Having been established in the town since 1952, we have played an active part in its economic and social development,” he says. “This massive project clearly shows both the range of our skills and our motivation in trying to conquer new markets.” Grubicza has become both a leader of men and an astute entrepreneur. He has a taste for movement and new ideas.

“Our work center is in perpetual motion. We work in teams and often resolve problems collectively, with site foremen.” He is very proud of belonging to a major international group. “The Central European department has been an enormous help to us,” he says. “Over the last few years, it has made us better equipped to face our competitors. All the efforts we have made to improve quality help us to cope with new types of contracts.”
Sacer
Le Pouzin: a proactive branch

From its office which stands on the banks of the River Rhône in southeast France some 20 kilometers from Valence, the branch has been growing over the past 20 years. It has anticipated market fluctuations and adjusted to changing needs in sectors like roadworks, telecommunications and power grids.
“Here in Valence we know how to do everything,” is the modest claim from Gilles Liébart, road area manager for northern Ardèche. Adds site foreman Edgar Ors: “Our branch has diversified tremendously. We can take on a job and handle it from A to Z.”

FROM ROADS TO TELECOMS

As well as road and public service works, the Le Pouzin branch also works with Compagnie Nationale du Rhône on laying concrete road surfaces: standard fare for a roadworks company. However, around 20 years ago branch office management noticed a drop in roadworks contracts. They decided to branch out into telecommunications. By the late 80s, their efforts were rewarded as telecommunications work accounted for 50% of the branch’s sales. From its catchment area in the Drôme and Ardèche, Le Pouzin has struck out all over southeast France. Its novel range of expertise is now acknowledged by all branches of Sacer’s Sud-Est subsidiary.

“The telecoms market comprises three types of work,” says Jacques Mindar, telecoms southern area manager. “They are routine maintenance, installation of phone booths and major projects like laying optic fiber cables. We have major projects as far afield as the Riviera and southwest France. We’re also working for some big mobile telephone operators in the Rhone Valley.”

Specialized work calls for specialized staff. “Our level of expertise is such that we export it throughout the region. We work to order and often to very tight time deadlines.”

Jobsites are frequently a long way from home base. They require painstaking preparatory work, well-trained, proactive teams and flawless standards.
of quality, as the customer, France Telecom, inspects everything.

FROM TELECOMS TO POWER NETWORKS

In 1995, however, the telecoms business began to show signs of flagging, and there was a reversal in the roadworks-telecoms pattern. But that was not a problem, as branch director Alain Testud had already hatched another scheme – power networks for EDF-GDF, the French national electricity and gas company.

Accordingly, in 1998, Sacer Sud-Est bought a small company which had gone into liquidation. The name of the company was Entreprise Rhodaniennne de Travaux (ERT). Sacer Sud-Est restructured it and renamed it SNERT, so entering an important new phase in its policy of adapting to shifts in market needs. Says Alain Testud: “The move has given

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**PORTRAIT**

Edgar Ors, site foreman in France’s Ardèche department

When Edgar Ors returned from Algeria in 1962 he was a qualified HGV driver. However, he felt his future lay in the building trade. He saw it as a way of discovering France, a country he knew little about, and of ultimately settling in the north of the country. But things do not always turn out as expected. Since 1975, Edgar has been living near Valence where he met his wife. “The Ardèche is an ideal compromise between north and south! It's still very rural,” says Edgar, who was keen to steer clear of the Mediterranean coast. He has been with Sacer since 1994 and has developed a pronounced taste for urban development projects. “You turn up in a spot which has nothing. You build a structure, lay curbs, restructure a village square or an arterial road. It’s fabulous.”

Especially as municipal authorities in the Ardèche invest in high quality infrastructure projects and materials. Because he spends months at a time overseeing job sites from A to Z, Edgar has built up close relationships with customers. A communicative man, he enjoys the friendly atmosphere at the office. “There are no barriers and lots of mutual support. We form a team and work as one.”
PORTRAIT
Gérard Monchal, telecoms team manager

Gérard Monchal joined Sacer as a laborer. He then graduated to driving a paver before going on to specialize in telecoms work. "It was a hell of an opportunity," he says. The only place he has not worked in southeast France is on the Riviera. He has installed phone booths, underground networks, pipes and manholes. And he does all the repair work. Very much his own boss, Gérard sets up his own appointments with France Telecom and organizes his weekly schedule. He travels the roads of southeast France with his teammate and the equipment he needs to repair damaged structures. "I mainly used to install phone booths. In 1995, we installed 250. But last year, the number declined, so I turned my hand to maintenance. I cover about 70,000 kilometers a year on average." Gérard is proud to be working in telecoms. "It's surface work. And surface work is where our corporate image is most visible."

rise to new synergy of resources, both in terms of people and equipment. Our aim is to focus on versatile teams."

The acquisition was an opportunity to establish contact with ERT's former customers, particularly EDF-GDF. "We also believe we'll be able to start deploying across the south of France in the next few years. In the same way as we did in telecoms."

SNERT also specializes in pile driving and routine masonry work especially in military engineering.

VERSATILE TEAMS TRAINED IN CUSTOMER CARE

Alain Testud likes to stress versatility. "When we work in a sector where business is sluggish, our men can switch teams." The advantages of this complementarity between skills are that the right man can be assigned to the right jobsite, employees assume functions that match their ambitions, and training and internal promotion are encouraged.

Alain Testud likes to give his men responsibility. He has trained them in his methods, particularly as regards customer care. As a
consequence, the branch’s strengths are as much the quality of its customer relations as the quality of its work. "Some local authorities ask for a specific foreman," he says. "The teams are very particular about the quality of their work. Especially as quite a few of the men work in small towns which aren’t that far from where they live."

QUALITY IS A REQUIREMENT

To meet the demands of its customers – especially France Telecom’s – as fully as possible, the Le Pouzin branch has been seeking ISO 9002 certification. The telecoms business secured accreditation in July 1998, and roadworks should follow suit in June. "We’ll have come full circle by the end of the year with SNERT’s certification," says Gilles Liebart, the company’s quality coordinator.

The teams’ levels of skill are such that the branch has exported its expertise throughout the region.

Alain Testud sees certification as an excellent tool for ensuring efficient routine management: "Quality entails looking at our methods from scratch."

The best road to good quality is good communication within the branch. Alain Testud has therefore stepped up short meetings where people constantly update each other on jobs in progress. And at even a passing mention of a problem on a jobsite, management hierarchy concerns melt away as everybody listens carefully.

A PROMISING FUTURE

Will the sector into which the Le Pouzin branch has newly diversified meet expectations? Alain Testud is cautious but confident: "It’s a question of time. With SNERT, we’re out to stake our claim to the future."
Creating new products, honing new methods, responding to new markets, organizing people, breaking new ground... What's changing at Colas round the world.

HAPPY BIRTHDAY

La Suburbaine 90 years on

Over 200 people gathered on December 3 at La Suburbaine’s Aulnay-sous-Bois office north of Paris to celebrate the company’s 90th birthday. It came into being in 1908 to produce gas for lighting streets and homes.

At the same time it was expanding its construction activity to build gas supply infrastructure for towns and homes. The company’s history is closely tied to the history of gas production and distribution in Greater Paris. For one brief spell, between 1946 and 1948, it enjoyed the status of Gaz de France employees.

In the wake of the nationalization of the French gas industry, it was renamed Suburbaine d’entreprise industrielle et de travaux (industry and works). In 1957, it was Suburbaine de grands travaux (major projects), before finally becoming Suburbaine de canalisations et de grands travaux (pipework and major projects).

The company today has seven offices and 400 employees in France.

For its 90th birthday celebration, its family tree was unveiled. It charts in written form what has hitherto been a chiefly oral tradition. It demonstrates how La Suburbaine has been under the stewardship of the same families, who have handed down a spirit of solidarity from generation to generation.
Somaro blows out 40 candles

Somaro turned 40 in 1998. The year was marked by festivities at company offices across France. This Tour de France began on October 12 at the Museum of Circus Arts. CEO Jean-Marie Jolivet addressed staff from head office at Chatou and Ile-de-France Nord Picardie branch, as well as some of its chief customers: "Forty years is a fine achievement. Hundreds of men and women have been part of it. The history of Somaro is the story of their efforts, skills and competence," he proudly stated.

Sales director Pierre Calvin charted this history from its beginnings in the laying of telephone cables to installing guide rails. He plotted Somaro’s policy of diversifying through external growth. It began in 1988 with paint company Indasco, followed by traffic sign maker Adem in 1989 and Elsi (traffic management) in 1991 – also the year Somaro created Sfer, a company specialized in work clothing. In 1992 came TSA (related equipment and urban furniture) and BRS (slip forms, concrete barriers and noise walls), in 1993 Euro-Equipement (metal parts), and finally, in 1997, Saba. Jean-Marc Cornut, operations director, then presented the company’s key figures. Finally, Alain Dupont traced Somaro’s smooth track record and set the target of becoming European leader in road safety signs and signals over the next decade. With the speeches over, it was time for everybody to get down to enjoying themselves by exploring the museum's many attractions.

On October 16 the Centre-Ouest Atlantique branch invited employees and customers to celebrations at the Château de Brissac in southwest France. Four days later, it was the turn of Somaro Rhin-Rhône-Alpes to welcome guests to Collonges Abbey with chef Paul Bocuse officiating. On October 22, Somaro Midi-Méditerranée rounded off the Tour de France in Arles at the hacienda belonging to Chico, founder of the Gypsy Kings.

APPOINTMENTS

Serge Body,
former director of RCFC Routes
has been appointed president of Colas Nord-Picardie.

Alain Decourchelle,
former operations director,
Colas Rhône-Alpes
has been appointed president of Colas Est.

Daniel Dupuy,
former deputy general director of Sacer Atlantique, is the new president following Bertrand Lemoigne’s retirement.

Patrice Haltebourg,
former operations director with Scrg Est, has been appointed CEO of Scrg Nord-Picardie.

Christian Lavedrine,
formerly CEO of Scrg Nord-Picardie, has been appointed CEO of Scrg Est.

Henri Robert,
has been appointed Group communication and marketing manager. He was previously sales manager with Scrg.

CERTIFICATION

1998: 44 new ISO awards in the group

By the end of December 1998, 133 Colas companies, branch offices and services had been awarded ISO accreditation, compared to 55 in 1997. Colas Denmark A/S secured ISO 14001 certification for its environmental management system. It was the first Danish roadworks company to receive the award.
Road safety: encouraging results in the second half-year

After a mixed showing in the first half of 1998, the road safety record for the rest of the year showed a significant improvement. In 1997 the number of insurance claims in the Group arising from traffic accidents in France concerned 2,954 vehicles out of a total fleet of 13,746 – an accident frequency rate of 0.21.

These accidents cost the Group heavily. And when vehicle repair, additional work accident insurance and temp workers’ wages are taken into consideration, the cost is at least double. There are substantial savings to be made on this heavy burden.

To date, the number of insurance claims arising from accidents in 1998 involves 2,587 vehicles out of a fleet of 14,251. These figures amount to a frequency rate of 0.18, 15% down on 1997.

Most of the credit for the marked improvement can be taken by those subsidiaries that have taken active steps to implement safety procedures.

It is worth recalling that the Group last year signed the Road Safety Charter, which pledged it to reducing vehicle accidents by 25% over three years.

Furthermore, branch offices can make use of a whole range of resources and procedures to improve employee awareness. There are classes within the Scope training scheme, regular steering Group meetings, safety committees and news bulletins describing work accidents and how they could have been averted.
SINGLE CURRENCY

Course set for euro

The euro is the European Union’s new currency. It came into effect on January 1, 1999, in the 11 countries which fulfilled requirements. They were France, Germany, Italy, Spain, Belgium, Luxembourg, Portugal, Austria, Finland and Ireland.

It was a truly historic event. For the first time, 11 countries of different sizes, cultures and traditions gave up their national currencies to adopt a single common currency. The inception of the euro was a major staging post in a process begun in 1957 with the Treaty of Rome, the founding act in European construction.

With its single currency the European trading zone will be better equipped to compete with the other two major trading blocks – the US and Japan. Colas, which recorded two-thirds of its sales in 1997 in the euro zone, is poised to rise to the European challenge. To help ease the euro into widespread use, it is to be phased in over a three-year period.

During the transitional phase – 1999-2001 – domestic currencies will coexist with the euro. Business transactions over this period can be carried out either in euros or in a domestic currency, free of any obligation to use one rather than the other. The only sectors to have leapfrogged the transition period are the money markets – which include stock markets.

They switched straight to the euro on January 4, 1999. Colas’s share price is quoted in euros. In line with practice on the financial markets, the Group’s annual reports and business-related press releases are this year to begin publishing key figures in euros as well as French francs.

YACHTING

The 16th Screg Challenge: setting sail

The 16th Screg Yachting Challenge will be held in May, from Thursday 13 to Sunday 16. The 1999 race is to take place off the coastal town of Concarneau in Brittany.

It is meant to be an occasion which is both enjoyable and competitive and is strictly for enthusiastic amateurs only. Some 70 yachts should be taking part.

The prime novelty this year is a new trophy. It is to be awarded to the best placed craft sporting the colors of a Colas roadworks company.

To find out all about the race and its rules, visit its Website: www.challengescreg.com

OPINION

Employees assess noise campaign

Nearly 92% of Group employees* have noticed at least one advertisement from the Group’s noise pollution campaign. Three out of five immediately grasped the anti-noise message. They preferred those aspects of the campaign which emphasized brand image and conveyed the message. Finally, 76% of employees questioned stated that the anti-noise campaign strengthened their sense of belonging to the Group.

* Telephone poll conducted in November 1998 in which 407 group employees were questioned.
PRODUCT

Plastiflex, a structural reinforcement for asphalt

It was Sceg that invented and developed Plastiflex—honeycombed, recycled polypropylene reinforcement. It is chiefly designed to reinforce asphalt on which very heavy traffic may cause severe rutting and bad subsurface cracking to rise to the road surface.

With 20,000 m² of reinforced asphalt laid, 1998 was the year the Plastiflex technology really came into its own. It can withstand tremendous strain. On jobsites, for instance, it can take the weight of the asphalt trucks and pavers while work is still in progress.

A typical large-scale highway jobsite was on the A72 near Clermont-Ferrand. Some 30 trailer trucks drove back and forth over a 500-meter stretch to feed asphalt to the three pavers operating in parallel over 4,000 m².

Injected into the Plastiflex are pins which dowel when it is laid. A special high modulus asphaltic overlay is used to fill the honeycomb cells to depths of five to six centimeters. Slabs can be laid both lengthwise and crosswise. They, too, are clipped together by pins which are injected into them.

The advantage of this system is that it offers great sizing flexibility, with prints of up to 0.35. It can be easily adjusted for curves which have radiiuses of up to 20 to 25 meters. In order to test the long term effectiveness of the technique, a trial stretch was laid in May 1996 in the slow lane of the A7 highway at the Lyons exit. For three summers, now, the stretch has borne a daily traffic flow of 5,000 trucks in either direction without the slightest evidence of rutting.

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<td>Bordeaux by-pass</td>
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<td>A630</td>
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<td>Traffic lights</td>
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<td>Bus lanes</td>
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ROUTES number 6
PRODUCT
Proreca, a strong, pliable grout
Proreca is a mix made from fly ash, binder and additive. It was designed and has been tested by RCFC Routes in Lens (northern France) since 1997. Purpose-designed for filling trenches, the grout can also be used to fill tunnels and stop up disused pipelines. It is laid by gravity and ensures perfect coating. Because it sets in just 24 hours and boasts considerable bearing capacity, pavement courses can be laid the following day. It can be manually and machine-excavated, so guaranteeing ease of access for pipework. Proreca self-compacts, so there is no need to use a roller. It saves cut-and-fill materials and laying time. It has been used to fill pipeline intersections for the city of Lille, to neutralize a pipeline for Gaz de France, and to fill an underground construction for the Nord-Pas-de-Calais Regional Council.

TRADE FAIR
Sacer Sud-Est at Pollutech fair
Sacer Sud-Est was present at the Pollutech trade fair, held last November in Lyons. It saw a steady flow of visitors including local authority representatives and architects. It was the opportunity to promote Miniphone, a gap-graded asphalt mix with low sand content which silences the rolling noise caused by the friction of tires on the roadway.

TRANSFER
A new plant for Silnice Praha
Silnice Stavitelestvi Praha, a Group subsidiary in the Czech Republic, had been seeking to modernize its asphalt plant at Bradlec, 60 kilometers north of Prague. A plant with a capacity of 120 metric tons/hour belonging to Colas Switzerland met Czech needs perfectly. It was dismantled last spring by a Czech team with backup from Colas Switzerland’s Technical Department. The plant was shipped by road on 18 trailers and specially designed trucks. It was reassembled and started up production late last summer.
The Order of Compagnons de la Route now numbers 500

The 1998 Compagnons de la Route awards ceremony was held on November 25. The Order consists of the Colas and Somaro Losange d'Or, the Sacer Top Niveau and the Sreg Ruban Vert. There were 76 new nominations honoring the best workers, selected by heads of French business centers and approved by the presidents of the French subsidiaries. Thirty-nine of the recipients work for Colas and Somaro, three for Sacer and 34 for Sreg.

This year's intake brings the total number of Compagnons de la Route rewarded since the Order was created in 1993 to 500. There are 17 regional orders, under the aegis of each subsidiary's president.

Before presenting the awards, Alain Dupont spoke about the primary purpose fulfilled by the Order: promoting an elite group of workers who were united by essential values, without which there could be no lasting success. "Because you are witnesses to our high standards and to our efforts, because you are hard workers, because for you the need to excel is stronger than ever, and because you go from success to success, it is right for us to come together, to meet, and to celebrate success founded on such simple and selfless values as exemplariness, pleasure in a job well done, friendship, consideration, and quality. You prove that there are still winners around whose triumphs are still based on unselfish values."

The Group Chairman went on to speak of the "fulfillment and vitality existing within each regional order," which was "so necessary to..."
develop a solid and genuine brotherhood of Compagnons at the heart of each company in the Group." He also touched on the role of the Compagnons on their return to their units: "The force of man is a deeply buried desire to continue – even in adversity – to believe in his dreams and to fight for the victory of what he believes in." After the ceremony, the celebrations continued with a dinner aboard a pleasure boat sailing along the Seine. The next day featured a guided tour around the Louvre, taking in such famous works as the Mona Lisa, Venus de Milo and the Victory of Samothrace.

These were two days of camaraderie, relaxation and enthusiasm, and for some of those present, it was a first chance to see Paris and the Group’s head office. There were many moments of fun and laughter, but most importantly, the new Compagnons de la Route discovered the new role they will be expected to play within their subsidiaries. Two days none of them will forget.

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**THE “COMPAGNONS DE LA ROUTE” FOR 1998**

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<td>PEREIRA</td>
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**ORGANIZATION OF THE ORDER**

Alain Dupont is president of the national council of Compagnons de la Route, which consists of all the vice-presidents. The council is responsible for ensuring that the Order's regulations are respected and furthering the development of the Orders within the Group.

Since April 27 1998 Christian Laplace, a road worker at Colas Rhône-Alpes, has been vice-president of the Order of Compagnons de la Route.

**INFORMATION AND TRAINING FOR THE COMPAGNONS**

Each Compagnon is personally informed by letter of the key events in the life of the Group. As for training, the Compagnons follow specific modules such as business economics, and how to train and integrate newcomers into the team, as well as modules on health and safety procedures, and the environment. This last training module has been operational since February 1999.
KEEPING THE NOISE DOWN

The campaign launched last September to advertise the Colsoft (Colas), Microville (Screg) and Miniphone (Sacer) noise-reduction surfacings seems to be paying off: jobsites are multiplying, and there is positive feedback from users. Nobody could be happier than Jean-René Lecerf, Mayor of Marcq-en-Baroeul. Interview.
Colsoft surfacing work was carried out by Colas Nord-Picardie last August in Marcq-en-Baroeul. Have you conducted a survey since the surfacing was laid? What feedback have you had from the public?

Jean-René Lecerf: I haven’t actually carried out a survey, but I have had positive feedback from residents of the streets in question and road users – everyone is extremely pleased with the reduced noise levels. This operation was a test. But it was such a success I would like to see all commissioners of public works – cities, departments, urban communities and state authorities – bring this process into widespread use, especially in heavily built-up areas.

What factors do you consider when choosing the type of road surfacing you want? Are your decisions influenced by residents’ associations?

Citizens are, of course, being consulted increasingly on public decisions. The way a road surfacing product is chosen has changed considerably over the last ten years or so. Up until 1989 or 1990, the main factor involved was price.

Today, however, with the increasing demands of residents, who are represented on local committees, quality – rather than cost – has become the main factor. This is even more important in cities, such as Lille, where urban freeways, bypasses and boulevards meet right at the city's edge. It goes without saying that the cost must not be exorbitant, but it is no longer the main factor governing decisions. It seems to me that preventing a build-up of rainwater and reducing noise pollution is more important. Given its noise-reducing properties, Colsoft should therefore be more widely used in heavily urbanized sectors of this type.

Have you seen or heard the Colas Group’s advertising campaign for noise-reduction on the TV or radio? What do you think of it? Should there be more campaigns of this kind?

Yes, we need more campaigns like this, to increase people's awareness of the link between industry and the environment. Industry has an essential role to play in the protection of the environment.

You are vice-president of the urban community of Lille, in charge of urban ecology. Has new thinking about ways of protecting the environment led to a new approach to noise pollution?

Political, administrative and technical authorities are clearly adopting a new approach towards noise pollution today. Construction is not the same as it used to be ten or fifteen years ago: people are no longer prepared to accept a reduced quality of life. For this reason, processes which reduce noise pollution and recycle waste, must be introduced for extensive use in the most heavily built-up areas.

This is one of the fundamental challenges facing us in coming years. Quality of life is not just about building roads which are fast and efficient. It's also about building ones which don’t fall into disrepair.
BEFORE
Mining on a downswing

Mines yield urban development zone

AFTER
Preserved mining heritage promises economic growth
Facing up to closures planned for 2004

Since 1910, the Alsace Potash Mining Corporation (MDPA) has been working a 50,000-acre mine in Wittelsheim, in the Mulhouse region of eastern France. Mining is scheduled to come to a complete standstill in 2004. Over the last few years, the mines have been closing down one after the other, and for some of them the redevelopment work has already started. As part of this redevelopment of the mining basin, the former Joseph-Else quarry has become the headquarters for a "green" industrial park, featuring a Stocamine site for the storage of final waste – in other words what is left on completion of all possible processing operations.

Building a modern urban development zone

Creating an access road to open up the site is the first step towards creating an urban development zone in the area not used by Stocamine. The project will breathe new life into the region, while safeguarding a unique heritage: the mine.

"Concern for the environment will be a key feature of the industrial park," says Marie-France Josserand, who is in charge of developing the Joseph-Else site. "We want to set an example with innovative schemes that are based on sustainable development by integrating the project into its surroundings – Rothmoos natural park, Nonnenbruch forest and a residential zone. And we'll seek to encourage environmentally friendly businesses to set up and grow. We'll also create a center of expertise geared towards the environment."

Scereg Est opens up the way to storage zone

At the end of 1997, as part of the plans for the rehabilitation of this former quarry, MDPA issued an invitation to tender for the opening-up of the zone, including the creation of a major road used to transport the final waste to the storage zone (it was impossible for trucks to pass through the nearby mining quarters). It took a year to build the road, which was by no means an easy task, owing to the specific nature of the site. The new road passes through a pine forest and crosses a railroad; in addition, all the underground pipes and mains had to remain in operation throughout the duration of the job. However, the team from the Colmar office of Scereg Est rose to the challenge, laying 3,000 metric tons of asphalt mix; 2,000 meters of curb poured in situ; 3,700 meters of pipes and mains, 1,200 meters of cast iron mains; and 3,000 meters of casing, not to mention 20,000 cubic meters of earthworks as well.
35 years in North America

For the first time since the Group opened its first North American office in 1963, the teams of all the Canadian and American subsidiaries met up for three days of meetings and other activities from November 12 to 15 in Scottsdale, Arizona.

The managers of Colas Inc. chose the much fancied North American vacation resort of Scottsdale near Phoenix for the get-together. With an average of 320 days of sunshine a year and an average temperature of 22°C., Phoenix is renowned for its pleasant lifestyle, its orange sunsets and sunrises, and its abundance of golf courses. With a surface area of 300,000 sq. km, the state of Arizona counts no less than 250!

Background
Last year marked the Group’s 35th anniversary in North America. Now let’s go back a few years. In 1963 Colas made its first move in Canada, buying Quebec-based Fabi and Sons and Modern Paving, which were to merge in 1974 to form Sintra Limited. Sixteen years later, in 1979, the Group expanded into the United States with the purchase of Barrett Paving Materials, present in six states in the east. The Colas Group’s expansion in North America continued with the acquisition of IA Construction in 1989, Delta Companies in 1993 and Simon Contractors in 1994. In 1998 came yet more acquisitions, with the April purchase of HRI Inc., Nello L. Teer, Sloan Construction Company, Reeves Construction Company and Sully Miller Contracting. Today the Group is present in 23 US states, from the East and Midwest to California. It is also active in five Canadian provinces and two northwest Territories.

900 million dollars in 1998
“The Colas Group’s North American operations play a major role, as they make up 15% of total income. Since 1963, the name Colas has been associated with small, local plants and facilities.
Over the years, that's the way we've grown, both in France and the rest of the world. And we plan to continue developing that way, i.e. by keeping a low-profile, but gaining maximum impact."

It was with these words that Michel Roulet, president of Colas Inc., summed up the Group's approach at the start of the meeting. Dominique Léveillé, vice-president of administration, then took the floor, adding: "This year we have become one of the largest road construction and asphalt mix production companies in North America."

The North American subsidiaries' core activities are road construction, its associated products and services and the companies boast an impressive array of resources for carrying out these activities. In 1998, 16 million metric tons of asphalt mix were produced by 147 asphalt plants. This makes the Colas Group a major player in this field in North America. The aggregates required to make the asphalt mix are supplied by 100 quarries scattered around the different states and provinces. These sites produce 16 million metric tons of aggregates. At the end of 1997, reserves were estimated at 710 million metric tons. "And we need to make sure our reserves are kept at this level in the future,"

The Group is present today in 23 US states, five Canadian provinces and two Northwest Territories. says Dominique Léveillé. The fleet of equipment is just as impressive: 1,100 machines, with replacement values of someone billion dollars. "Although our main activity is the production of asphalt mix, we are also developing more specific activities, such as the production of ready-mixed concrete and emulsions. Emulsions, in particular, are set to take off considerably over the next few years."

Another feature of work in

**RECENT ACQUISITION**

**Conquering the west**

Sully Miller Contracting Company is one of the Hanson Group companies which became part of the Colas Group in April 1998. With its base in California, it represents the Group's first breakthrough on the American west coast. Sully Miller Contracting was set up in the 1920s by two local entrepreneurs who had realized the need to build roads around the city of Long Beach. Over the years the company has expanded, and has two divisions: Sully Miller Contracting - specializing in the construction of roads, parking lots and airport runways - and Blue Diamond Materials, who are responsible for the production of asphalt mix. The company carries out work on about 100 jobsites a year. It essentially works in the greater Los Angeles area, which stretches from Santa Monica in the west to Riverside and San Bernardino in the east, and the San Gabriel mountains in the north. This zone of activity, which extends some 80 km from east to west and 60 km from north to south, is home to around 13 million people.
North America is that the teams operating on the many jobsites – particularly in Canada – tend to be seasonal and "elastic", varying in size from 2,800 to 6,100.

Work...
After this general overview, which reflected the Group’s strong base in North America, the two days of work were dedicated to the presentation of each subsidiary. Two-person teams from each company gave dynamic presentations interlaced with films and audio-visual material. The presentations all took the same form, covering general themes such as the company’s history, key figures, activity, strategy, etc. but they were all different, as each subsidiary manager tried to give an idea of his company’s personality in just a few minutes. In order to break the ice, the presentations were interspersed with amusing films and jokes about roads. The participants also heard talks on subjects of interest to everyone, such as human resources, law, safety, technical matters, etc. Dominique Gardy, CEO of Shell Oil in the US, was then invited to describe the country’s oil activities. Finally, in his conclusion, Michel Roullet summed up the content and spirit of these meetings in a few sentences: “Each and every one of us has made the Group what it is. Colas is strong, but needs to be even stronger.

“We are people, we are a force, we are a team, we are the North American team.” Thus went the slogan of the North American get-together.
investment returns and keep cash-flow levels high."

...and play
The two days of work were followed by a day of recreation. Some of the participants tried out one of the local golf courses; others took in Phoenix’s many museums and cultural attractions, while yet others set off in jeeps to explore the desert, on the lookout for 100-year-old cacti – part of the state’s botanical heritage. It was a day of relaxation which allowed the participants to get to know each other better. The three hectic days went off without a hitch, thanks to tight organization, right up to the farewell dinner held on a ranch, where teams tested their strength and sense of humor – by playing cowboys!

"Elastic"
workforce: 2,800
6,100 people employed by the subsidiaries.

POINT OF VIEW

Question for Bruce Rieser,
CEO, Sully Miller Contracting Company

After six years of recession, 1998 is a year of transition for Sully Miller. Can you tell us why? The long recession in California, which had serious economic repercussions in the South, led to a drastic decline in construction expenditure between 1989 and 1997, resulting in a huge drop in company revenues and profits. In 1997 the construction industry showed signs of recovery: the housing market picked up, with an increase in sales and construction permits. The non-housing sector also saw a 27% rise in business: office construction doubled, and there was a 50% increase in the industrial sector. In our opinion, 1999 will be a good year for the housing market in California, with an increase in both business and profits. President Clinton has earmarked 216 billion dollars to expand and maintain the US road network for the next six years. What are the consequences likely to be for your company? California is the main beneficiary of this funding, which was voted in June 1998; it is set to receive 2.4 billion dollars a year, for six years – in other words some 10% of the total funds. These funds will result in a 44% increase in work to expand and maintain the US road network, compared to previous years, but an increase of almost 45% for California. Legislation provides that for every dollar allocated by the federal state to the Highway Trust Fund, the state will claim back 90 cents in the form of taxes on gasoline. In our opinion, this provision will have a considerable effect on road expenditure. Consequently, if the authorized expenditure levels are reached, and if the states and cities can levy the required taxes, the total demand for construction work could see a two-figure increase in our sector of the market.

What type of contracts do you anticipate? We plan to continue concentrating on those areas we have specialized in for years: the construction and repair of roads throughout the valley of Los Angeles. We also expect a slight rise in our market share of private construction projects, as a result of the upturn in the Californian economy.
Sharing a diversity of skills and experience

Learning from each other
Three enlightening days dedicated to sharing ideas and experience.
Feedback.

The working meetings

"This get-together gave us a chance to meet one another, talk about our jobs and the challenges we face, and make new friends. I enjoyed both the formal meetings and the leisure activities."
Haluk Alemdar, Dillman Entreprises Limited

"Although our companies are all different, they share the same basic goals and values."
Wayne Patterson, Terus Construction Ltd

"The presentations over the two days were ultra-professional, holding our attention despite the sheer quantity of information we had to take in."
Jean-François Berthiaume, Sintra, Abitibi-Témiscamingue-Lanaudière Division

"It was clear that everybody in the Group shared a passion for work and success."
Gilles Theberge, Métropole division

"This opportunity to discuss technical and personal matters, without worrying about competitive advantages and disadvantages, and strategy, was completely unique. The Colas Group's goals in North America and the Group's goals in general are very stimulating and exciting for all members of the team. This event should lead to a more focused, global approach."
John R. Kulka, HRI Inc.
The people

“There was a great feeling of solidarity between the participants. We all had the same approach to safety.”
Michel Nault, Sintra

“We were pleased to hear Colas and all the North-American companies say loud and clear – just as we do – that their employees are their best – and most important – resource.”
Harry A. Thomas, Sloan Construction

“The career prospects within the Group are very exciting.”
Georges Aussie, Barrett Paving

“We feel that we are an integral part of the Group - important cogs in a big wheel. We are confident that the company is well prepared for the challenges of the third millennium.”
Robert Vanasse, Sintra, Métropole Division

“It is clear that after this meeting Colas North America is even more of a team, and is ever ready to strengthen its base and welcome new partners.”
Daniel Ducroix, Sintra

“We have lots in common, but lots to learn from each other too.”
Bruno Morissette, Sintra

“This meeting was an excellent way of motivating people, and gave them a chance to feel they belonged to the Group.”
Serge Ouellet, Sintra, BML Construction Division

“It gave us the opportunity to meet other members of the Group and improve our understanding of what they do.”
Joe Regenhardt, Delta
The Group

"It taught me how important having another language is for communicating within the Group."
Normand Bedard, Sintra, Centre-Estrie Division

"Staff from companies new to the Group said how positive they felt about their integration."
Bob Field, IA Construction

"As a newcomer to the Colas Group, I was given lots of support and made to feel very welcome. It is clear that the Group attaches a lot of importance to individuals, and is actively committed to staff training programs, career promotion, safety, and protecting the environment."
Roger C. Dill, Reeves Construction Company

"The Group is well aware of its social and environmental responsibilities, and takes them completely on board."
Germain Perron, Sintra Inc.

"I realized how dynamic the Group is, and how high its level of technical expertise is."
Real Busque, Sintra Inc.

<table>
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<th>Staff per subsidiary</th>
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<td>1957</td>
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<td>DELTA</td>
<td>1962</td>
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Asphalt plants: 147 in total
Asphalt mix production: 16 million tons
Aggregates: 16 million tons
Quarries: 100
Aggregate reserves: 710 million tons
Total number of machines: 1,100
Replacement value: 1 billion dollars
1998 Revenues: 900 million dollars
Average frequency rate: 12.89
Safety index: 4.28
Severity rate: 0.33
Workforce: 2,800 to 6,100
The Group’s 127 plants
metric tons
produce over one million
of binder
One is a laboratory manager for Strada, another drives a patching machine for Arnaud TP, a third runs Reeves in the US, yet another is a metal worker/welder for Colas Switzerland, in the Arvel quarries. Every day, all of these people give it all they've got to make Colas succeed.
Setting an example

Antonio Pereira,
Team leader at Résipoly

Antonio is the longest-serving Compagnon at the Villeneuve-le-Roi plant. He is also the first person at the resin specialist subsidiary to be awarded the Scrego Ruban Vert. Antonio started out when he was 18 years old at the Bonneuil office, where he initially trained in application. A few years later he moved to the nearby Villeneuve-le-Roi plant – and is still there 25 years later. “I’ve progressed naturally over the years, and I’m still learning,” he smiles unassumingly. The Villeneuve plant is like a second family now. “There’s a good atmosphere, and everybody enjoys working together.” Coming to Paris for the Ruban Vert award ceremony gave Antonio a chance to meet up with his colleagues from other subsidiaries. “I was proud that I was the only person from Résipoly!”, he says. Antonio returned to Villeneuve, really geared up to motivate his fellow workers. “Now, more than ever, I must set an example,” he says. It’s back to work as usual. The team leader pitches in, manufacturing products, servicing the machines, and in general, rolling up his sleeves. Whenever he gets the chance, he initiates newcomers to the wide range of skills he – like all Compagnons – has at his disposal.

Seeing the world

Jean-Michel Maes, Ivory Coast administrative supervisor

When Jean-Michel Maes joined the Group in 1996, after graduating from business school and obtaining a postgraduate diploma in internal auditing, he had one thing in mind: working abroad. His first year in the audit division at the Group's head office in Boulogne set him on a number of visits to jobsites in France and abroad. Then, on April 1, 1997 Jean-Michel packed his bags for a longer stay. Destination: the West African regional management office. “They were creating the job: I accepted right away!” he laughs. A year later, on April 1, 1998, he joined the Ivory Coast subsidiary to take charge of the administration department. “What I love about the job is its diversity. I oversee bids, finance, staff, insurance, legal affairs, tax matters and more besides. Sometimes all in one day!” Needless to say, the job is demanding, both in terms of time and patience, and calls for a high level of personal commitment. Jean-Michel is not complaining, however – far from it. One thing he does regret, though, is that he doesn’t get to see much of life on the jobsites, as they are often hours away from the capital.
A passion for driving

Philippe Delaye, site vehicle driver, Colas Nord-Picardie, Amiens office

Driving Philippe Delaye traded in farm machines 23 years ago for construction vehicles. For nearly a quarter of a century he’s been behind the wheel of his excavator at the different sites covered by the Amiens office. This dedication means he has probably worked with all the site managers at Amiens.

“You have to adapt your methods to the different people you work with; train the youngsters, who don’t always want to listen to us old-timers, and earn the respect of the older staff,” he says. However, finding solutions to problems is never difficult for Compagnons like Philippe.

“You have to set an example, and show initiative.” This passion for driving does not stop when the Losange d’Or award-winner parks his excavator: on weekends Philippe runs a model-making club, building small racing cars which zoom along special race tracks at speeds of up to 100 km/hr. Work and play overlap, as Philippe would like the track surfacing to be done by no other than... Colas.

One day, the racing cars might sport the company’s diamond-shaped logo. Meanwhile, Philippe acts as spokesperson for Colas, with local authorities.

From metalwork to stagecraft

From metalwork to stagecraft
Giulio Piras, metalworker and welder at the Arvel quarries in Colas Suisse

Giulio Piras, who comes from a small village in Val d’Aosta in Italy, was trained at an early age in metalworking and welding in a spinning factory. In the 1960s, while on holiday in Switzerland, Giulio met a friend who suggested he set up home there. Despite only having very basic French at the time, in 1966 Giulio packed his bags, crossed the border, and embarked upon his long career at the Arvel quarries. Giulio’s job involves working metal and making and repairing parts for all the site equipment and machinery. He is a key team member.

“I have always loved working and making things with my hands,” he says. Making sure the crushing plants are working properly is not Giulio’s only passion.

Since he made his first stage appearance in a school production at the age of 14, the young actor discovered another love: theatre. After a number of stage successes over the years Giulio – although still an amateur – now works with well-known actors, and has gone on to direct, setting up his own troupe. With retirement around the corner, this confirmed bachelor has one dream: to direct “Twelve Angry Men” by Reginald Rose.

Take your seats, please, for Giulio’s next performance!
Bringing his skills to the Caribbean

Constant Mabilia, head of the paint application team, Somaro Midi-Méditerranée Pyrénées

His first name is Constant, but his colleagues call him "Paul" for short. "It's easier," they say. Paul, then, left his native Guadeloupe in 1984 to carry out his military service in mainland France. After signing up in the French armed forces for three years, he started his career applying road paint, which then brought him to Somaro in 1992. In this region of the south of France, the team leader learned to drive paint application vehicles and to carry out all kinds of painting jobs. One day, when weather conditions made road-marking operations impossible, Paul had a go at learning how to install guide rails. But he soon went back to painting. "I can't help it - that's what I like best," he says.

Last summer, his bosses asked him to go back to Guadeloupe to lend a helping hand to local teams there. "I thought it was a joke to start with, but it wasn't! A few weeks later I was on the plane. I couldn't believe it!" Once there, Paul trained and motivated his compatriots with the same enthusiasm he brings to the training of all the company's new recruits. Paul has just received a Losange d'Or award, perhaps as a result of this successful Caribbean assignment.

Eric Thijs - expert in zero defect

Eric Thijs, director of operations at Tubobel, Screg Belgium

Eric Thijs joined Tubobel – the Belgian concrete pipe specialists – in 1991, after spending 15 years in a design office. At last a chance to roll up his sleeves! Eric's job involves looking after technical and production matters, as well as managing human resources and quality. In the eight years he has been with the company, Eric has learned all there is to know about the plant's production tools and how to achieve "zero defect" levels. When the Belema and Bonna companies merged last October, Eric brought his skills to the newly-formed company, Tubobel. "Today, we've strengthened our leading position in the Belgian market drainage pipe, increasing our market share by 20%," he boasts. Today, production is expanding, and care has to be taken to ensure that the new products meet the same requirements! That's no easy task for a plant that produces 50,000 m² of concrete – the equivalent of 150,000 metres of pipes. "We are carrying out hundreds of design studies with the laboratory, to prepare for our ISO certification, expected this year," Eric tells us. He's certainly got his work cut out for him. Don't ask Eric what he does in his spare time – he doesn't have any!
Like father, like son

Gilbert Breuil, equipment manager, Gabon
Frédéric Breuil, head mechanic, Benin

Gilbert, in Gabon, is in charge of a fleet of 573 machines, 106 local employees and eight expatriates. Frédéric, his son, works on a jobsite in the north of Benin. They share a passion for mechanics and motorbikes. After growing up with mechanics on jobsites in different African countries, it was only natural that Frédéric should opt for Africa to pursue a his career as a mechanic. Today, at 58, Gilbert would like to retire to his peaceful native Champagne, while his son rolls up his sleeves and gets on with the job. There are 30 years between them — a generation. A generation of machines, and a generation of computer technology. When he looks back on his career working with machines, Gilbert has only one regret: not having had the time to come to grips with computers, unlike his son, who never goes anywhere without his laptop. One of the things Gilbert has enjoyed about his career is working with young people, and teaching them the job. He looks back with pride at the list of men he has trained who now have key jobs with machines. "Getting people to look at things in a new way often means you have to do the same!”, he says. Frédéric is the first to admit that he has learned a lot from his father. He goes on to add, however: “But now I need to be acknowledged as a person in my own right, with my own skills.” It’s not so easy to follow in his father’s footsteps after all!

Expert in emulsions

Aldona Mizgalska
Laboratory manager, Strada, Poland

After learning about public works and technique at high school in Poznan, Poland, Aldona Mizgalska specialized in civil engineering and road engineering. On her arrival at Strada as laboratory manager, when the company was set up in 1992, she studied bitumen emulsion technologies. "When Strada joined the Group in November 1997, we were able to expand our services in the field of Polycol P and Grave Emulsion technologies,” explains Aldona. “It was an opportunity for me, since it gave me the chance to work with the Colas and Screg laboratories, and to meet some fascinating people.” Totally at ease in this very male environment, she believes that “women really do have their place in this business. Their sense of precision and their patience are invaluable for this type of work.”

"Women really do have their place in this business.”
From tractors to patching

Patrick Julien, patching machine driver
Arnaud TP, Colas Rhône-Alpes

After studying agriculture at high school, Patrick Julien was all set for a career in farming. Land was scarce, however, in the wine-growing region of Valréas in France’s Vaucluse department. The farmer’s son therefore had a change of heart, and joined Arnaud TP, a subsidiary of Colas Rhône-Alpes, as a driver. He drove a trailer-truck, a truck, then a grader. For the last three years, he’s been driving a patching machine. Although he misses the controls of the grader he used to drive, Patrick is happy with his automatic patching machine. “I like it a lot, because of the teamwork. We organize our days as we see fit, and in the evening we write up our site reports on computers. Also, since our company was taken over by Colas, we have been involved at a very early stage of the work.” Patrick has no regrets about giving up his planned career in farming: it would have been much more lonely, and the results irregular. In any case, to keep his hand in, Patrick helps out his parents on the family’s land. They grow vines, whose grapes Patrick’s family sells to the local wine co-operative. The family also cultivates oak trees for that famous French delicacy – the truffle.

A Georgian career

Roger Dill,
President of Reeves
Atlanta, United States

When I joined Reeves in 1984, boasts Roger Dill, “the highway sector was booming, and since then we’ve been gaining new ground every day.” Flash-back: in the 1950s, the United States were heavily involved in the Interstate Program. It was designed to link up the various states by highway and was launched by President Eisenhower. During this period, Roger decided to study engineering in a program run jointly with the armed forces, which provided him with training in the road construction sector, as well as experience in the field. He started his studies at Auburn University, and worked for the government. On graduating, he joined the Georgia Highway department and worked in a number of sectors up until 1980. During this period he followed other training courses, such as Certified Manager Training, which inspired him to set himself more ambitious goals. In 1980 he went into the private highway construction sector, joining Reeves Construction Company in 1984. In 1986, Roger was appointed vice-president of the company. In 1993 he was made president. “Of all the US states,” says Roger, “Georgia currently boasts the second highest rate of growth. Recently, additional subsidies for road maintenance were obtained, and the company’s future is looking bright.”

“Of all the US states, Georgia currently boasts the second highest rate of growth.”
Luc Ferry,
in favor of an ethics commission on the environment
The philosopher and political scientist Luc Ferry published *Le Nouvel Ordre écologique* in 1992, an essay in which he writes off ecological fundamentalism. For him, the revolutionary ideology of radical ecology has disappeared. He explains.

**Until recently, it seemed possible to reconcile ecological concerns with the economic development of the modern world. However, the reactions of the Green Party in France are becoming increasingly virulent. How do you explain this hardening of attitude?**

I don't see any hardening of attitude – quite the opposite, in fact. In the 1970s and 80s, two ecology movements appeared: one was reformist and humanist in nature, and aimed to reconcile development models with the need to protect the environment. The French model was moderate green party Génération Ecologie. The other movement was more radical, strongly opposed to the link between the idea of economic development and the idea of ecology, while advocating a return to revolutionary ideas. Today, I think it is the reformist model that prevails - one which tries to correct the harmful effects of industrial development. The revolutionary ideology of radical ecology is now virtually non-existent.

**READING**

- *Le Sens du beau* 1998
- *La Sagesse des modernes* Lefort, 1998
- *L'Homme-dieu ou le sens de la vie* Grasset, 1993
- *Le Nouvel Ordre écologique* Grasset, 1998
- *Des animaux et des hommes* Lgf, 1994
- *La Pensée 68* Gallimard, 1988
- *Heidegger et les modernes* Grasset, 1988
- *Le Système des philosophies* Puf, 1987

**What are your most recent ideas about ecology? Will the current trends be those of the third millennium?**

Ecology developed in industrialized countries in parallel with the Welfare State. Citizens want ecology in the same way as they want to be protected by the State. In the same way as they want health protection, people want the State to intervene to prevent irreversible mistakes as regards the pollution of the environment. This is why, deep-down, citizens do not want political or militant ecology. It is easier for us to identify with a speech by naturalists like Jacques Cousteau or Haroun Mazieff than one by a left-wing militant who wants to do away with modern industrial society. This is why I would like an ethics commission on the environment to be set up one day in France, to shed light on the public debate, just as there is an ethics commission on life sciences, whose task is to define the notion of sustainable development. The job of this commission would be to highlight the real issues which must be dealt with by companies and the State, and to establish ecological priorities.

**Existing infrastructure allows us to bypass city centers. There are more and more “clean” cars, while new types of surfacing reduce rolling noise. Surely these constitute measures to solve ecological problems?**

Yes, these measures are important. Ecological movements have resulted in positive trends. Without them, companies might not have realized the need to protect the environment. Some ideological movements can play a useful role in making us aware of certain problems, even if the responses are not always those the militant ecologists wanted. The new awareness of industry is therefore to be welcomed.

**The Colas Group works in about 50 countries. Ecology seems to be a luxury for rich countries only, though. In a few years time, won't we have to pay for today's mistakes?**

Western countries developed the ideas of the Welfare State to protect human beings. In the name of these ideas we developed ecology. However, the development of ecology is not related to the level of the country's development, but to that of the protection of the individual. Of course, poor countries put development before ecological concerns. But ecological problems are global, planetary issues. Rich countries like ours therefore have a responsibility. There is no point in being "ecological" in our own country if we don't practice what we preach elsewhere. It is in our interest to help poor countries introduce the principles of ecology.
Jacques Oudin insists the 21st century will be built on roads

The French government has cast doubt over the national motorway development program. French Senator Jacques Oudin, who is president of an association dedicated to the future of motorways, shares his views on the subject with us.

Motorways occupy a preponderant place in the transport of both people and goods. However, the French government has put a question mark over the national motorway development program and prioritized railroads instead. How do you react to this? I think it is regrettable for a number of reasons.

In the first place, we live in a society constructed around cars, and we have not yet evolved beyond this. Traffic flow, both in terms of people and goods, has increased at twice the rate of economic growth. And although we don’t yet know what level we will reach, we know that the curve is rising.

In addition to that, our society needs flexibility and we haven’t yet conceived a system as flexible as roads, guaranteeing no additional loading and unloading.

And finally, as it is always claimed that the France of the 19th century was constructed thanks to the railroad, there is no denying that the France of both the 20th and 21st centuries will be constructed primarily on the basis of the road, more than high speed trains and air transport. Since the motorway plays such a dominant role, the most urgent thing to do is to complete our motorway network.

“Since the part played by motorways today is so dominant, we now must urgently complete our motorway network.”
The problem of funding motorway construction is often raised as a reason for modifying, postponing or even canceling projects. Do you believe it is possible to find a method of funding that is compatible with budgetary resources and which satisfies the demands of the European Commission?

All the rumors concerning the cost and non-profitability of motorways are false. Overall, the French motorway network is cost-effective. With the right realignment of toll income, it is perfectly capable of financing its own development. The debt of the motorways is trivial by comparison with its income and, in the future, the concession system. This system, which has proved to be a success, is already starting to be exported outside France, to the United States among other countries.

As symbols of freedom, cars and, through them, roads and motorways have come under virulent attacks from environmentalist parties and lobbies. How do you account for this degree of hounding, which, to say the least, appears rather “over the top”?

I would say it’s more a matter of ideology than economics. Today, with legislation covering the atmosphere, the countryside and water, motorways are perfectly integrated into their environment, and, what’s more, they are responsible for job creation. But their attacks are still more serious in terms of safety. French motorways take 20 percent of the national traffic, but generate less than 3 percent of accidents. As I have pointed out at the tribune of the French Senate, and repeated in a number of other forums, every kilometer less of motorway often means one more death. We are confronted by a real problem of responsibility.

Last June, you founded an association called Autoroutes Avenir (“Future Motorways”). What are its aims?

We set up Autoroutes Avenir as a reaction against the decisions that had just been made by the French government, and to preserve the benefits of legislation on national and regional development passed in 1995. Through this association, we intend to organize regular parliamentary debates on the national motorway development program and on national and regional development. In our view, this legislation is decisive in making France into the hub of European motorways, opening up all French regions and improving access to the coasts.

In concrete terms, what initiatives does Autoroutes Avenir intend to take in the near future?

Our aim is to unite economic players, political leaders and road users with an interest in the construction of sections of motorway that will open up access to the various French regions. We will maintain a permanent analysis of the evolution of the financial and legal situation of the motorways sector so that we always know what possibilities there are for future development. We will perform this work in conjunction with representatives of the roads industry and with road users. And our association will lend its support to the joint parliamentary committee that draws up the national motorway development program.

Clearly, we have a very large task ahead of us, but we are confident that we will complete it successfully.

> ITINERARY

A total commitment to roads

Jacques Oudin has served as Senator for the Vendée department in western France since 1986. He is also vice president of the Vendée regional council. In 1983, he created an association to promote the Anjou-Vendée highway, and then, in 1986, an association in support of the Atlantic-Rhône-Rhône motorway. In 1992, he took over the chair of another road association, La Route des Estuaires. Since 1997, he has been co-chairman (with Michel Inchauspe, deputy for the Pyrénées-Atlantiques) of the joint parliamentary committee responsible for drawing up the national motorway development program.

In June 1998, along with other national and local politicians and figures from the business community, he founded Autoroutes Avenir, an association which he chairs.
The road is poetry. It conjures up images of elsewhere, of landscapes beyond landscape.

The Colas Foundation asked you to do a painting on the theme of the road. To what extent does this theme inspire you?

In the first place, I think the road theme is interesting from a pictorial point of view. It’s a little like a piece of string. It’s an element that can link together a series of different objects. So, I can use it to organize the composition of space in a painting. But the road is also a poetic theme. It’s the perfect example of perspective. And because it comprises a vanishing point, it conjures up images of elsewhere and conveys the fact that there are landscapes beyond landscape.

Your work is miniature and reminiscent of Persian painting or works of another time. Where do you draw your inspiration from?

I get inspiration from various sources. I’m interested in all periods in the history of art. But I have a special fondness for the Middle Ages and the Sienna school. Whenever I look at work from those times and places, it’s not just the story they tell which fascinates me. I like their simplicity, their lack of concern for technical artistry and realism. There is no extra layer that comes between the beholder and the sheer pleasure of visual harmony.

Is it difficult for a young artist to make a name for him or herself today? And how do you judge the world of contemporary art?

My work doesn’t fit in with the kind of contemporary art on show in public galleries and museums. What’s on exhibit seems to me to be concerned chiefly with theoretical issues which, in my opinion, are secondary. Intellectual considerations all too often outweigh emotion. Personally, I’m interested in painting which has more to do with the senses. But there are ways of making a name for yourself. I sometimes sell to amateur enthusiasts, and I also do portraits on commission.

As well as being a painter, you also make short films. One of them, in fact, is to be screened at the Clermont-Ferrand film festival in France. Do you believe that painting and movie-making are closely related?

In the past, I devoted myself to making films. But that’s now a secondary activity. Both painting and the movies are visual arts. But painting is a solitary task. It transfigures reality and draws on the imagination. The cinema is based on team work. It’s a photographic medium, steeped in reality and motion.

Finally, what do you think of Colas’s desire to set up a foundation that promotes contemporary paintings and sculpture?

The effect of corporate foundations could be to offset the kind of work predominantly on show in public places.
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Each round tree has a road that winds around it like an improbable past, beckoning to the future, running like a river between the androgenous knolls of a land poised at vanishing point. The future steps across the material present to where the day after tomorrow is part of the past.