



Winners

Eiffage 2016 Work Challenge

Digital Challenge

First prize: Safety force | Infrastructures Division

Eiffage's Infrastructures division designed a smartphone app for risk prevention, measuring safety performance levels in real time on the division's construction sites all over the world by assessing compliance with the Infrastructures division's 20 fundamental safety requirements.

Strong points:

- Each user takes part in the assessments.
- The application uses a predictive algorithm to calculate the probability of an accidental event occurring and alerts the relevant teams as necessary.
- The tool is available in four languages: French, English, Spanish and German.
- The tool is accessible by all users who have a business smartphone and a business email address.
- All users can view all the information published on the app.

Winning team: Thierry Coquin, Érick Lemonnier.

Second prize: Workflow | Energy Division

Improve operational efficiency by implementing digital workflows and minimising paper media and the number of tools used by teams.

Strong points:

- Digital construction site records: synchronisation of electronic construction site records, streamed from an Eiffage server to tablets.
- Management of purchase orders for processing in Operis
- Worker and vehicle schedule management, on a half-day basis, for the foreman and his teams.
- Management of a leave request workflow for the foreman and his teams, validation by line management and information sent to HR.
- Application accessible on computers, tablets and smartphones.

Winning team: Pierre Antonot, Jonathan Heurteaux.

Third prize: Maintenance contract for photovoltaic power plants | Energy Division

Use of a Typhon Q500 drone to optimise annual inspections under 25 photovoltaic roofing maintenance contracts. Using the drone equipped with a 4K camera, the panels can be inspected without having to climb on the roof. If any work is necessary, the drone can also be used to stretch a string from one side of the roof to the other. The string is used to pull up a rope which, once attached to a fixed point, secures the operator when he first climbs onto the roof.

Strong points:

- Live images sent to the computer at ground level.
- Instant analysis, then photos can be taken if any problem is detected.
- Visual inspection without having to climb on the roof.
- Secure repairs.

Winning team: Emmanuel Alduc, Philippe Capelle, Nicolas Couderc, Pierre Lagar, Benoît Mirabel, Edmont Privat, Patrick Rouquette, Christophe Sahuc.

Business Fundamentals Challenge

First prize: Airbus Safran Launchers maintenance contract | Energy Division

The AST Airbus Safran Launchers-Les Mureaux project relates to a maintenance contract for electrical, pneumatic and hydraulic easements for the Ariane 5 ground facilities. This contract, which has been extended since 1994, involves a lot of technical and logistical constraints: multi-technology process, ultra-clean conditions, customer's organisation and requirements, availability of facilities.

In order to address these constraints, the Eiffage team of eight people relied on the strong technical skills of the parties involved as well as their expertise in the various technical fields, HR management tailored specifically to the project and high service quality for an outstanding economic outcome. The customer sent the team a letter of congratulations on its service quality, excellent relationships and responsiveness.

Winning team: Jean-Marc Abrassart, Alexandre Boussat, Hugo Cataldi, Manuel Cerdeira, Jérémie Clergeot, Pierre-Marie Dain, Yvan Heintzmann, Jérémie Johner, Élodie Romanow, Matthieu Schillinger, Alexandre Vucher.

Second prize (tied): Urban Park Bagatelle | Construction Division

Urban Park is a project for the construction of two buildings totalling 84 two- to four-bedroom flats in Saint-Herblain (near Nantes).

A new procedure was implemented during the project, focusing on four areas of progress: prevention and safety, productivity and quality.

These four pillars resulted in implementing actions that had a real impact on the end result. For instance, the Zero-Accident objective of the prevention and safety pillar was achieved by developing circulation plans and collaborative, scalable storage areas with subcontractors, organising cross inspections with the master craftsmen and even daily warm-up exercise sessions.

Productivity was also greatly improved by implementing the *Last Planner System* in parallel with weekly reviews with the team leaders. Lead-times were reduced by 12% and the subcontracting companies were very satisfied with the new approach.

Winning team: Véronika Alokhina, Paul Delsaux, Ricardo Gramoso, Benoist Mabon, Jérôme Rassat, Alain Riguidel, Mickaël Rousseau, Thomas Vicari.

Second prize (tied): Renovation of two penstocks at the Aston hydro power plant | Infrastructure Division | Eiffage Génie Civil

The renovation project for the Aston hydro power plant's two penstocks included the creation of a penstock section, total external re-painting of existing penstocks, and the dismantling of a section that had become obsolete. It was a highly challenging project given the extreme geographic and weather conditions (mountainous area) and the inherent technical difficulties (inclines of up to 70%).

In order to overcome the technical difficulties and meet the customer's requirements, prevention was crucial. A monthly newsletter, "100% Sécurité", and a good practices guide were circulated and 452 15-minute safety meetings were scheduled over 124 weeks of work, leading to an outstanding result: zero accidents in 92,000 hours worked. Action planning was also optimised, notably so that the plant could continue operating during the work. Even better, the penstocks were delivered one month ahead of schedule! The customer commended the team's work and rewarded them with a bonus.

Winning team: Jean-Numa Boillot, Bertrand Borde, Clément Braouët, Mario Da Silva Goncalves, Claude Donega, Carlos Goncalves, Michael Goncalves, Pascal Lamouroux, Anne Leygonie, Alain Manent, Pierre Montsegur, Fernando Neto Monteiro, Mohamed Ouichen, Madjid Ouzioui, Daniel Rebelo Castro, Laurent Rosell, Ahouseny Sawadogo.

Third prize: Village des Marques de Miramas | Infrastructures Division | Eiffage Route

Village des Marques de Miramas (a shopping outlet) will be the first in South-East France (in association with Eiffage Construction). This project, which aims for a Very Good level in the BREEAM® rating benchmark, will have 20,000 m² of retail space with 150 shops and restaurants. It will require moving 120,000 m³ of earth in 1.5 months, laying 69 km of new networks, 15,000 m² of natural stone coatings and 12,000 m² of turf grass alveolar slabs. The Eiffage Route teams set themselves the goal of planning ahead for the earthworks and network laying before starting on the elevations, limiting joint activities, managing risks, meeting milestones and delivering on time and on budget. All the employees were on board to review the project's entire initial design and carefully think about the resources required to optimise productivity at all levels, preserving the interests of Eiffage Route while earning the customer's trust.

Winning team: Marc Ambrogio, Jean-Jacques Avidor, Robert Barkat, Jean-Pierre Barral, Anthony Bruno, Patrice Buffenoir, Romain Caillol, Joaquim Cantin, Claude Castinel, José Fernandez, Franck Giaimo, Patrick Gione, Jérôme Girault, Didier Gouraud, David Grumeau, Franck Hurtevent, Pascal Landie, Philippe Lermisson, Jean-Marc Mathieu, Claude Mistre, Thierry Moulinas, Pascal Nogues, Christian Pizano, Éric Ponsard, Florian Roux, Grégory Scheyer, Olivier Segui, Patrick Teilhaud.

Special prize: Annecy maintenance centre | AREA

The Annecy maintenance centre is in charge of the motorway sections A41 North, LIANE (Annecy-Geneva) and A410, located in the Haute-Savoie department. It comprises 40 employees who ensure year-round, 24/7 presence.

This centre is responsible for:

- ensuring the safety and fluidity of road traffic.
- maintaining the motorway network.
- ensuring work is performed properly and safely.

When planning work on a motorway, the centre constantly strives to find the most appropriate operating mode in order to minimise the work's length while guaranteeing everybody's safety and limiting inconvenience for drivers.

Given the weather conditions and heavy traffic, the teams are on constant standby in the winter. The Annecy maintenance centre runs a special training centre for the entire network. This winter, it is introducing an innovative communication system to inform customers ahead of snowfall, which can disrupt traffic significantly.

Although the agents are highly exposed to risk, the centre had chalked up 1,000 straight days without any lost time accidents at 31 December 2016. This achievement is the fruit of sustained teamwork, encouraging each person to act preventively on a daily basis.

Winning team: Jean-Yes Baudel, Pierre Bellot, Jérôme Betrix, Guy Favre, Joseph Leone, Brice Lortscher, Sébastien Magnin, Jean-Louis Million, François Paget.

