



A Truly Remarkable Project

The runway renovation wasn't just a routine project. It was, in fact, so unique that it attracted international attention. We give you the inside scoop of a heroic and highly creative team effort.

For lux-Airport, in many ways, 2021 and 2022 were the years of the runway renovation project. The contract was signed with the contractor end of December 2020, and with a deadline at the end of 2022, no time could be wasted. We are happy to report that the runway renovation has now been finished!

This is a good time to look back at the beginning of our most exceptional project – not least because the launch of such a large-scale undertaking always comes with its own challenges. “At the start of the project, the scope and schedule seemed challenging,” Airside Project Manager Romaric Paille says about the kick-off of the execution phase of the renovation in May 2021.

You might think that a runway renovation should be a straightforward affair. However, several factors made the execution very challenging indeed: while other airports may simply close a runway while the work is carried out and shift operations to the other runways, this can't be done at lux-Airport, because there is only one runway. The second option would be to close the entire airport and reroute traffic to neighbouring airports. But this was not possible either, because there is no other suitable runway in the country, nor nearby, to ensure the retention of the economic activity.

“At the start of the project, the scope and schedule seemed challenging. The trick is that you are not alone. With the right team, it works.”

**— Romaric Paille,
Airside Project Manager**

The only way out of this dilemma was to carry out the complex work while keeping the airport operational – with all that this entails: work at night, safety and compliance issues, security procedures, and complex logistical problems, to name some of the major challenges.



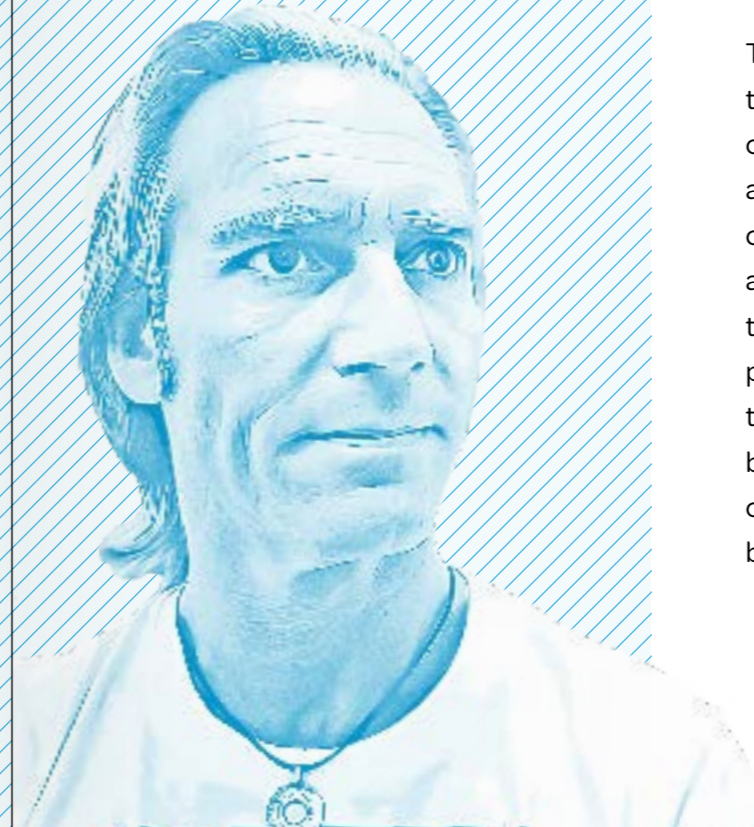
WATCH
THE VIDEO FEATURE
ON THE RUNWAY
RENOVATION:



https://youtu.be/t_WpU8dpDOA?feature=shared

**“In terms of safety,
we did our home-
work well.”**

— Remy Verheezen,
Head of Safety & Compliance

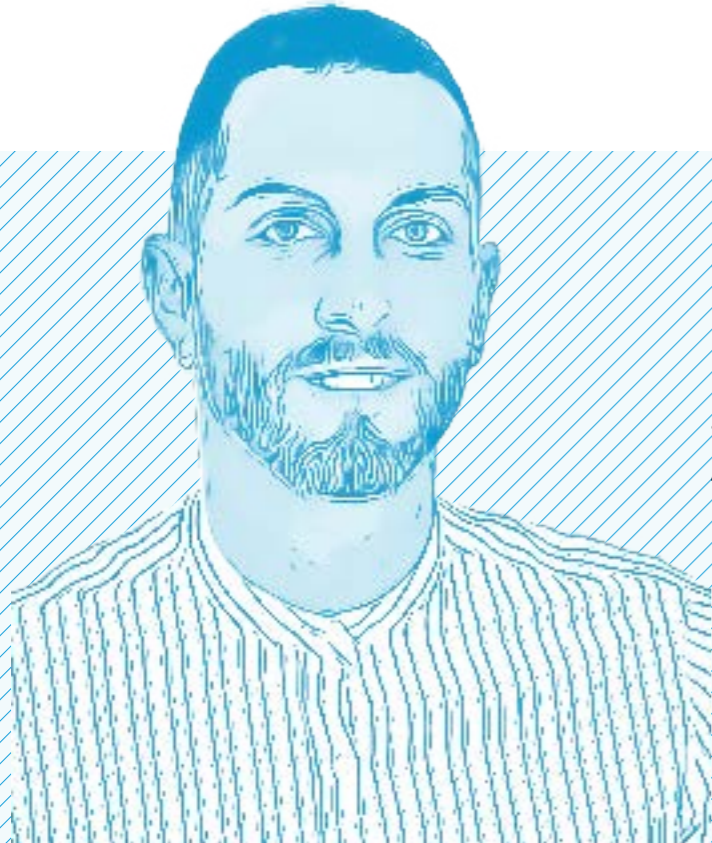


A DIFFICULT START DURING COVID

As if this technical and operational challenge wasn't enough, during the crucial first phase of the project, the team couldn't physically meet with the relevant parties such as other departments, contractors, project managers, and representatives of the relevant authorities. “To get an alignment with everyone was a challenge,” remembers Remy Verheezen, Head of Safety & Compliance, “because we were still working from home when we started with the preparations.”

To understand the significance and importance of in-person meetings, consider the complexities involved: the plan was to build an entire new runway on top of the existing one at night, while operations continue almost as normal during the daytime. Add to that the fact that passenger numbers just started picking up again after the difficult year of 2020, that 2021 was a record year for the cargo business, and you begin to see the potential conflicts and need for close coordination between the project partners.

“The works required the closing of the airport every night at 11 in the evening and the fully safe and compliant reopening at 6 in the morning,” says Airport Duty Manager Sebastien Dejean. This required a lot of alignment, not least because decisions needed to be made about exceptions for landings and take-offs as well as any last minute changes in the works: “We had three regular meetings every day where we had to decide, for example, whether we delay the works for several minutes for delayed flights to land, or whether we need to re-route them.”



**“You are part
of a project like
this only once
in your career.”**

– Sebastien Dejean,
Airport Duty Manager



These decisions had a big impact on flight schedules and passengers on the one hand and construction logistics and planning on the other. And they were far from trivial. Can you delay the beginning of the work for 15 minutes to accommodate three delayed flights? What would that mean for the works? To get a sense of the pressure, imagine more than 100 heavy construction machines, 200 to 300 workers as well as supplies waiting beside the runway. Everybody is ready and eager to use the narrow time window to stay on track with the complex work schedule. Amidst all of this, you must make the decision: can we wait a bit? What would that mean for a timely reopening at 6 in the morning?



“All the stakeholders were really committed and understood the need to balance operations and works. Everyone had their own interests, but we established a good level of cooperation and were continuously finding solutions.”

— Derek Allard,
Head of Airside Operations



**“In the morning,
a 747 was seen landing
where not so long ago,
there were all those
construction machines
and workers.”**

– Alain Fisch,
Airport Duty Manager



That the airport could in fact be reopened on time every single day during the project is a testimony to the team’s successful efforts – despite the occasional last-minute urgent actions: “One night, we had an oil spill from one of the construction vehicles close to the re-opening,” Airport Duty Manager Alain Fisch tells us, “but we managed to clean it all up and have the runway ready for use just in time.” On another occasion, one of the construction workers had forgotten a shovel near the runway – but that was spotted during the pre-opening inspections and solved as well. Considering the complexity of the works, the size of works areas, and the demanding timeline, it is great to see that all procedures, trainings and inspections have resulted in ensuring a safe and efficient transition from work zone to operational runway. It says a lot that there were no major problems or hiccups to report.

A WHOLE NEW SECURITY CONCEPT

Another example of the sheer scale of the challenges involved in the project were the necessary security procedures. After all, at an airport, workers and trucks cannot just enter the airside area without proper security checks – a situation that contractors and workers are not necessarily familiar with. “On the one hand, we needed to optimize the security process time as much as possible to guarantee a smooth workflow, and on the other hand we had to maintain

the requested level of security,” explains Daniel Conrardy, Director of Security. “With a narrow window of seven hours at night for the works, all relevant processes had to be optimized.” Some of the measures he and his team have implemented were the issuing of permanent Airport IDs for all workers, detailed training of the workers on how to prepare themselves in advance in order to speed up the checks at the gates, not to forget the construction of an entire new security gate designed to handle the huge peaks at the beginning of each work shift.



The security checks of the vehicles and their load proved to be equally challenging: European legislation demands that airport supplies used within the airside area need to be inspected. Since you cannot inspect, say, sand and gravel with X-Ray machines, but you cannot unload those supplies for inspection either, this means you have to escort the trucks to the construction site to inspect the load there during the unloading process. This is a very time- and personnel-intensive endeavor which was mainly done during daytime. Considering also that up to

140 trucks came to the site every single night with hot bitumen, escorting procedures for those kinds of supplies were entirely impractical. The team had to find an alternative solution together with the authorities. “Therefore, we did a detailed assessment of the whole process of how asphalt is produced and transported,” remembers Daniel Conrardy. “The result of this assessment allowed us to implement specific security measures, giving us the possibility to check the hot bitumen without the need to escort those supplies.”



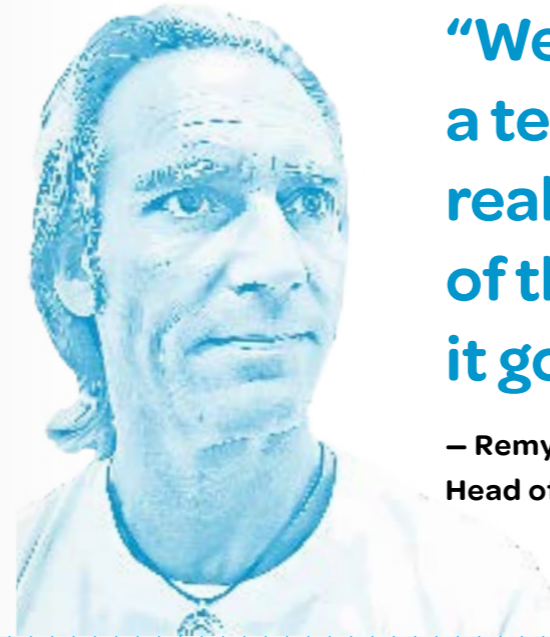
TO TOP IT ALL OFF: REDUCED RUNWAY OPERATIONS

Demanding as the project already was, the team decided to make it even more difficult. With works in 2021 focusing mainly on the Western part of the runway, the idea came up to open the Eastern part of the runway to handle delayed and humanitarian flights while the work was still ongoing. A complex series of safety assessments had to be carried out to make it happen. The result was a big red line of lights in the middle of the runway, with an enormous work area on one side, and a fully compliant and safe runway on the other side.

“On the one hand, you saw 300 people working with lights, steam, and machinery,” Chief Operating Officer Tom Goris describes the scene, “and on the other hand, you saw a 737 landing with 180 happy passengers returning from their holiday.” A very delicate concept. But the results speak for themselves: in 2021 alone, over 1,000 passengers used this exclusive reduced runway setup – passengers who otherwise would have been rerouted. Many of them would have ended their holidays on a negative note. Thanks to this impressive team effort, they didn’t have to.

Despite – or because – of all the complexities and massive team effort involved, everyone is very happy about the experience in 2021 and 2022. The project has even become internationally known to the point where experts were coming in to learn about how lux-Airport had been able to achieve this.

The success wouldn’t have been possible without a driven, knowledgeable group of internal and external people working in close cooperation – as one team. As Romaric Paille puts it: “For such a project, alone is not enough.” ■



“We got a lot closer as a team, and our cooperation really improved. I’m proud of this whole team and how it got everything done.”

**– Remy Verheezan,
Head of Safety & Compliance**

“We are very proud and satisfied with how this project went.”

**– Daniel Conrardy,
Director of Security**

