TESI SQUARE x bofrost*

bofrost* FRESH TO YOUR DOOR
revamps transport management

To increase the efficiency of its inbound and outbound transportation processes, which involve approximately 5,000 vehicles a year, bofrost, Italy's leading player in direct home sales of fresh and frozen speciality foods, has chosen Tesisquare's TMS system, as part of a comprehensive rethink of yard operations at its central site in S. Vito al Tagliamento near Pordenone, and at its more than sixty branches located across Italy. The advantages of the system go well beyond specific transportation needs, to cover significant issues such as cost-cutting and process efficiency.*

A conversation with **Matteo Emanuele**,
bofrost* Technical, Supply Chain and Food Quality Manager

Work on the project began when I joined the organisation, in March 2021, a time when, because of Covid, many consumers turned to providers like us, whose business is selling and home delivery of food products. Given my previous experience, developed largely in manufacturing companies, the last of which paid close attention to logistics and service levels, when I arrived in Bofrost the first thing I wanted to do was conduct a process analysis, to understand the main functions and numbers, and any critical issues.
Remember that bofrost* handles around 5,000 full trucks a year, split evenly between inbound and outbound. Inbound traffic relates to all the raw materials for the central frozen (negative temperature) and no frozen (ambient temperature) production and logistics hub at the S. Vito al Tagliamento site; whereas outbound traffic carries goods for the more than sixty branches located across Italy, equipped with cold storage rooms and all the resources needed for picking products for distribution.

The main critical transportation issue was non-optimal management of the loading and unloading yard. In practice, distribution of these full trucks during the weekly calendar was fragmented, because there was no effective supplier slot booking system, but simply an email or telephone agreement between our logistics people and the haulier, on a general schedule for the trucks. During the week, this type of planning was inevitably subject to change caused by a

variety of unpredictable events, such as traffic conditions, especially for inbound long-distance trucks, or initiatives taken by the supplier, who could deliver goods even without prior notice. In addition to the discontinuity of traffic, advance receipt of the documents needed for correct management of incoming goods, such as loading lists or data from temperature sensors, was problematic. So, we held an internal meeting and decided to conduct a market survey on possible yard safety and efficiency solutions.

What were the features of the Tesisquare offer that you found convincing?

A number of factors were involved in our decision to choose Tesisquare, from learning about the product through to the formalisation of the project at the end of 2022. First, we were dealing with competent people, who understood the bofrost* situation immediately, and so were able to identify with our needs and our objectives. Another positive factor for us was geographical proximity: not just because the Tesisquare HQ is next to our local branch, but also because it is an Italian company, whose staff are physically accessible, and so in the best possible position to respond to our enquiries quickly. So, valid people, first of all, with whom we were able to talk often, at our location too, and together work out the best solution for our requirements, with maximum flexibility and availability. Besides the actual product characteristics, which turned out to match our objectives, strong empathy with the supplier – demonstrating that even when you're dealing with technology, human considerations should never be underestimated – meant we were able to establish a true partnership, thanks to which we are now discussing other ideas and projects for the future, looking at strategic issues and exploring everything Tesisquare can do for us, as an all-round solutions provider.

What is the procedure now for hauliers entering the unloading yard?

The first stage in the project, which went live in September 2024, introduced supplier unloading slot booking on the Tesisquare logistics platform.
We organised the infrastructure and set up the rules for the hauliers to select their slots, based on product type and volume, which also determine complexity and the time needed for the corresponding warehouse operations: in other words, the number of pallets to be unloaded. Based on these parameters, the system automatically determines the length of the slot, and also takes into account the possibility of unloading more than one truck at a time.
This stage in the project generated a first important upgrade, resolving another weakness in the previous system. Today we can collect accurate data on what actually happens in the yard, such as operation times and procedures; we can then analyse this information and identify all the ways to improve resource efficiency, from personnel available in the warehouse to the number of trucks that can be received during a particular day.

And what will the second stage involve? What is the roll-out time?

The many additional steps we are implementing will include the possibility to access the booking system for outbound transport too, in other words for all the vehicles loading finished products to be transported to our branches, even if this has already been planned internally. In this case, the advantage is not so much in actual planning, but in greater safety and fluidity in yard traffic. Vehicles can enter the yard autonomously by registering their number plate on the logistics platform, which opens the gate when the number plate is read by the camera. This has facilitated traffic flows in the yard, and above all brought a substantial improvement in data management. By linking all the inbound and outbound number plates to a single price list for all hauliers, we automatically obtain a costing for all transportation services. Previously, this was handled through manual data entry on a Microsoft Access platform. By migrating the data to the Tesisquare system, we can now automatically draw up a business proposal or pre-invoice for our hauliers, with cost control made much easier, faster and transparent with respect to the largely off-line system we were using before.

The next steps in the project, which are part of the second stage, are equally interesting. For example, there will be a tracking system for both inbound and outbound vehicles, through a mobile app developed specifically for bofrost* by Tesisquare, with which the driver will be able to upload their journey by reading the barcode on the booking slip. This login, together with geolocation of the driver's smartphone, will generate an expected time of arrival for vehicles coming to the bofrost* hub, and, even more important, for outbound vehicles travelling to our branches. The system means that staff at bofrost* branches will know in advance when trucks coming from the hub will arrive and organise themselves accordingly.
Another tool provided by Tesisquare is geofencing, which enables perimeters to be set around geo-referenced points – the hub or the branches – based, for example, on distances in km or average travel time. When a specific vehicle passes the geofence, this sets off an alert which sends the relevant information to the appropriate staff. For example, I can set a 15-minute geofence around our Milan branch, and when the truck coming from San Vito passes the fence, the branch manager will receive an automatic alert that it will be coming into the yard in 15 minutes.

Of the last two points in this stage of the project, which we expect to be completed by the end of the summer, one is a system to manage the requests for tenders we regularly issue inviting providers to submit bids for services. Rather than being stored on spreadsheets - which are managed manually, on separate media, with all the possible related errors – the information will be located on unique dashboards, to speed up and facilitate the assessment and selection process.
The other is a pallet management module: for an organisation like ours, which handles more than 150,000 pallets a year, this is extremely important. Accurate accounting of pallet transfers across the entire bofrost* network, hub, hauliers and branches, unimpeded by the physical and time limits of a paper-based system, will ensure constant alignment on these data, generating both operational advantages (a reduction in the imbalance between incomings and outgoings) and financial benefits, considering the sharp price increases of the last few years and in any case the huge number of pallets used in our operations.

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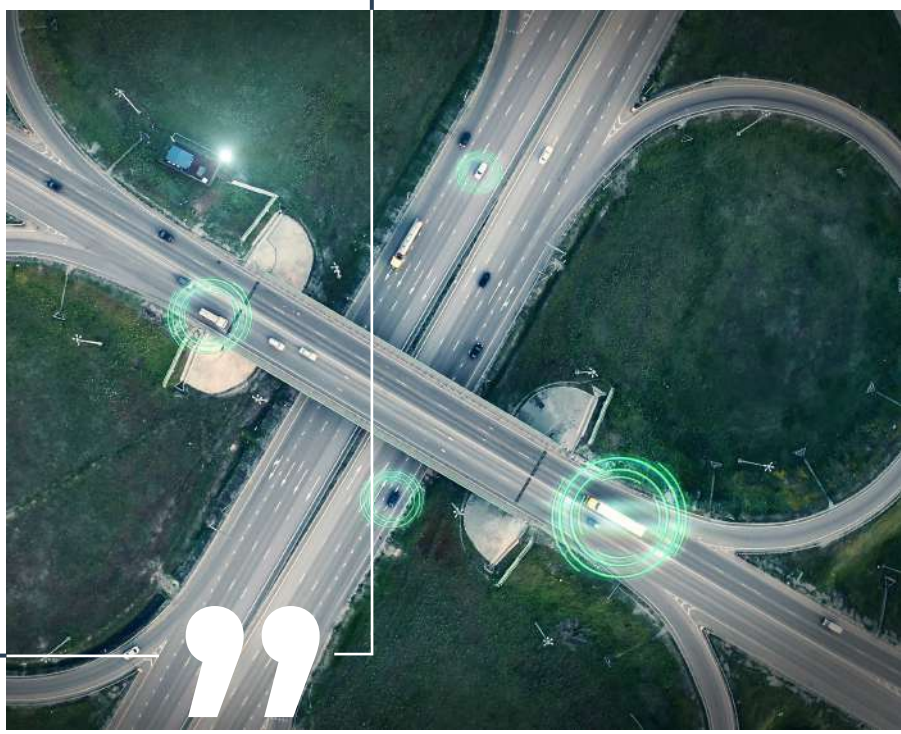

Apart from the operational advantages, such as more efficient yard flows and greater operating safety, do you already have an idea of the economic benefits provided by the solution? Have you estimated the payback time on your investment or the project numbers?

A reliable calculation of this sort will only be possible once we have completed the second stage of the project, which is currently underway, with the functions responsible for transportation service costing or pallet accounting; only then will we be able to compute our ROI accurately. At the moment, as you yourself said, we have certainly achieved good results in the yard, with better traffic organisation and a visible reduction in the main operating inefficiencies; there are bound to be economic advantages too, but we will be able to calculate them later on.

In terms of benefits, these projects can also be linked to our business objectives in general: everything that is more efficient upstream cannot fail to have positive effects downstream, in terms of level of service. Even though in this case we are talking about processes inside our yards, I can only think that every operational improvement, every financial saving achieved even at this stage, can be a benefit for our whole company, and consequently for the end user, who may be the last link in the logistics chain but for bofrost* is unquestionably our primary concern. The thing that distinguishes us from other e-commerce players is not so much the purchase procedure, but the trust-based relationship we want to establish between our salespeople and the customers they see on a regular basis. Trust, reliability and quality are what we believe are the distinctive factors of our market offer, and reciprocally, are also the values we think have guided the latest logistics reorganisation projects.