

Thierry Guimbaud is the Director General of Voies navigables de France (VNF), whose responsibilities cover the development of river logistics, the development of territories around the waterways and the management of water resources.

Last week, we discussed the topic of river transport in a context of Covid-19 outbreak. With our IFGR member Thierry Guimbaud, we decided to broaden the focus and talk about the post-crisis period, the challenges facing VNF and the actions taken to respond to environmental and climate issues.



Water management is one of VNF's missions. You are also a key player in water management in France. How are the 6,700 km of rivers and canals for which you are responsible in France?

Yes, VNF is also a "water carrier" and hydraulic management is a central mission for the company, which must guarantee the water supply to populations, farmers and industrialists and ensure their safety through the very rigorous management of our structures that regulate the flow of water. It is also a question of meeting the needs of navigation, of course. It is therefore a strategic mission on which our employees are concentrating all their efforts during the health crisis.

"our river system (...) is more and more directly facing the consequences of climate change"



Pont-et-Massène Dam @VNF

What are your water management challenges in the fight against global warming?

It is obvious that our river network, closely connected to the hydrographic network of our country, is more and more directly facing the consequences of climate change. It is now exposed all year round to increasingly high and low water levels.

In addition, the proliferation of algae and invasive plants is linked to the rise in temperatures and pollution. This subject is becoming a major ecological balance problem in certain parts of our network.

Global warming imposes an economical and sustainable management of water resources; therefore VNF is modernizing in order to improve its capacity to anticipate and preserve the resource.

For several years now, VNF has been "instrumenting" its river network in order to monitor in real time the water levels, flows and water withdrawals made in the natural environment. This monitoring makes it possible to better anticipate hydraulic management throughout the network and to optimize the management of water resources, for a fair distribution between the different uses.



Application pour la
Gestion HYdraulique et la
Ressource en Eau

This supervision is accessible to all in real time on the AGHYRE portal (Application for HYdraulic Management and Water Resources).

It is also with this objective in mind that we entered into a partnership with Meteo-France¹ at the beginning of the year. It is a further step towards more refined and reactive water management. In addition, we plan to conduct a research partnership with Meteo-France and the Central Service for Hydrometeorology and Support for Flood Forecasting, for example, to study the trend in the rainfalls and hydrological regimes in the medium and long term on our network and our activities.

¹ MeteoFrance is the French weather and climate agency

Finally, we act on the structures themselves (navigation dams, reservoir dams, water intakes, dikes, etc.) by regenerating and modernizing them to make them more agile and safer to operate.

From a qualitative standpoint, I alluded to this when I mentioned invasive vegetation, VNF undertakes numerous actions to preserve species and wetlands to help maintain biodiversity on and around waterways: use of bio-engineering to protect the riverbanks, development of spawning grounds, fish passes, etc.

At the same time, we strive to control the impact of our activities on water quality, whether during maintenance works or dredging, use of phytosanitary products or waste management. This is the key criterion for evaluating the environmental performance of the various activities of the establishment.



Hydrocotyle, an invasive plant, has invaded the banks of the French-Belgian river, the Sambre @ Yann Fossurier / France 3 Nord

How did you manage this mission during the lockdown period?

In the field, the organization deployed aimed to make the hydraulic network safe, by continuing the operation and maintenance of the structures, in order to guarantee water supply and prevent possible flooding.

There was a real fear of an episode of spring flooding, in a context where the catchment areas were close to saturation following the rainy winter (the dam-reservoirs had reached their highest level with, in mid-March 2020, an average filling level of 90% for all the facilities), which required mobilizing a large number of agents in the field, with difficulties in ensuring compliance with barrier gestures.

However, during the two-month crisis period, there was very little rainfall, less than the seasonal normal. We only noted an episode of torrential rain in mid-May which required a fine management of the food system of the Canal du Midi in the Montagne Noire. But, in fact, the nature of the crisis has globally changed. Some areas are beginning to have difficulties in supplying water to natural rivers and canals, particularly in central France.

This underscores the increasing criticality of water management in our country. This is a very strong point of vigilance for us.

Your major projects include: a major project connecting Seine and Scheldt networks, and transitions throughout the sector, such as the greening of river transport, of which you are one of the main promoters. Do these two themes remain priorities and bring hope and jobs at a time when we are discussing the challenges of post-covid recovery?

“It is because it carries this geostrategic vision that Europe strongly and constantly supports the Seine- Scheldt project.”

The Seine-Nord Europe Canal, whose construction has been entrusted to a regional project company in whose governance we participate, is part of a larger European project, the Seine-Scheldt project, at the heart of the North Sea-Mediterranean corridor. For its part,

VNF is directly involved in the project management of heavy regeneration operations upstream and downstream of this infrastructure, which is unique in France. The construction of this wide-gauge link between France, Belgium and the Netherlands - the lack of connectivity between the basins is, it is true, one of the weaknesses of the national river infrastructure - will contribute to the development of the hinterlands of the French ports on the northern coast, from Le Havre to Dunkirk. By fixing the industrial and logistical added value along the waterway, it will also contribute to the economic dynamism of the territories crossed by the creation of jobs that cannot be relocated. Beyond the 100 km new canal that will be dug, it is a formidable logistics strategy project in our country. It is because it carries this geostrategic vision that Europe strongly and constantly supports the Seine-Scheldt project.



The Seine-Nord Europe Canal @VNF

With the significant increase in the budgets for the regeneration and modernization of the existing network, this project also marks the end of a long period of under-investment in river infrastructure; for my part, I also want to see it as a sign of strong public ambition and expectation in the role that the river sector will have to play in the future.

The greening of the fleet is also a strong challenge for the contribution of the inland waterway sector to the energy and ecological transition ...

Yes, absolutely. The fleet must rise to this challenge, and **while waterway transport offers huge environmental benefits, it does not escape objective scrutiny of its environmental performance.**

River vessels are indeed sometimes quite old, and the engines have a long-life span, but the fleet must adapt to new requirements in order to maintain its natural competitive edge. It has specific characteristics, linked to "navigation in a confined environment", which require a major R&D effort, to which its low number (around 1,000 freight vessels are registered in France) opens up limited prospects for amortization.

The profession is fully committed to this change and VNF is supporting the industry's efforts in this direction, either to transpose existing solutions into other modes, or to continue research. It is in this spirit that we have strengthened our financial support instruments: the 2018-2022 Modernization and Innovation Support Plan (called PAMI in French) includes a €2 million innovation component over five years, open not only to freight transporters, but also to many technical service providers and even river tourism professionals, provided that the innovations proposed can also benefit the river freight sector.

The forthcoming signing of Green Growth Commitments (GGCs) under the aegis of the French government should mark a decisive step in the commitment of all players in the river value chain. VNF plays a major role in this. It intends to continue and amplify this policy.

Are these two themes, infrastructure development and branch transition, still priorities?

You mentioned these emblematic works. They are indeed structuring to enable the river to play its role in the future.

They only take on their true meaning, however, because they are part of a multitude of equally important projects - whether it concerns the development of the use of the waterways in urban logistics, their good integration in the logic of circular economy by a better valorization of sediments, the optimization of the network of inland ports, or again the equipping of the public fluvial domain with alternative energy supply points.

The list is long: **they all contribute to improving the economic and environmental performance of the sector to guarantee its sustainable development.**

Interviewed by par Aziz Ouaabi