

IntermodBOIS

Implementations of the conditions for intermodality in wood sector

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1. Introduction

The objective of IntermodBOIS was to create the conditions for increasing railways use (with or without shortlines) while working with the potential users and the new actors. The project was declined in several phases: diagnoses of the wood and railways sectors, focus on important parts of the chain, definition of multimodal schemes and case studies.

Centred on the Burgundy area, this PREDIT project carried by FCBA (coordination), H-Log and Objective OFP, was done with 9 companies partners: 3 forest providers, 2 wood road carriers, 2 wood working companies and 2 railways' operators. Other actors were met to supplement and widen the exchanges of this project which is included in the category of the studies/action.

Why a research on the sector wood?

- At first, transport of the wood sector (inputs) is ensured almost entirely by road because of the supply distances often lower than 100 km and the lack of offer from the railway sector. However the railway mode remains an option for the wood companies and will be necessary to fulfil the national objectives of the Grenelle de l'environnement (additional 21 million m³ of wood collected at 2020).
- Moreover, the wood sector is typically a difficult sector for dense transport: the forest representing 28 % of national surface, flows related to the wood harvest are diffuse, different one year on the other and uncertain (bad weather, storms), demand necessarily road transport to collect the wood in forest, supply companies of very diverse size (from very small size to production facilities consuming more than one million tonnes per year). These problems of management of diffuse flows are typical from soil related activities which have a strong impact on regional development.

The principal conclusions presented hereafter were voluntarily generalized: they constitute a general experience feedback so that an industrial activity which does not use railway anymore can return there. They constitute the result of the project, i.e. a method (section 2). The consequences and practical aspects of the project are then declined under two dimensions (section 3): 1/ in bond with the object of study (wood sector and Burgundy); 2/ in a generic way by identifying ways to carry out the research and to better meet the needs. Lastly, the operations of valorisation of the project are specified (section 4).

2. Result

One can summarize the result of IntermodBOIS like the development of a methodology of research/action to adopt a collaborative approach on two dimensions: sectors and territories. Even if the focus was on the railway transport, the method is multimode. It integrates the road mode and the railway one, but can also be appropriate for inland water ways. It is a sociotechnical approach of the organizations. It deals with the topics of: creation of value, "which gains what", evaluation of the quality of the links of the value chain. This can bring to question the organizations themselves.

The method is appropriate for the multipoint ones/mono point at the origin (like the soil activities: forest, but also agriculture, biomasses) or on arrival (distribution for example) and is based on 4 dimensions:

a) To have potential flows bases, i.e.

1. To detect flows allowing the economic viability of an ad hoc railway company such as shorline.
2. To identify and motivate the actors associated with flows bases.

Several methods to have flows bases:

- By the existence of dense flows (few actors of big size) for which, the requirements in collaborative approach are potentially less strong (even if the principle is not true in all the cases, the requirement in collaboration can be positively correlated with large number of involved actors).
- By structuring the road transport flows.
- By having concentration areas.
- By companies having convergent needs.

b) To mobilise stakeholders

This mobilisation requires:

- An institutional framework like taking action in a research project.
- A realistic and adaptive objective.
- A group of potentially motivated actors
- An active catalyst: “a trusted third party”.
- Actors waiting for evolution.

It is done by an iterative approach and various means:

- A global work: organization of regular meetings with stakeholders and direct contacts in parallel. The process is based on proposals of the catalyst to get reactions, to promote ongoing process even the adaptation or the rejection of the proposed solutions, to formulate new proposals, etc.
- Case studies: to have case studies allows approaching to operational dimension and concrete conditions of the stakeholders. On the basis of proposal, a process is engaged in which the participants react, they also can drive the case in a stronger way (be force of proposal and even be co-actor).

c) To lead to the awareness of reconsidering the global logistics schemes

This awareness pre-existed or begins gradually during the project. It must be found:

- For industrial sector(s)
- For the railway mode (or the inland water ways)
- For the road mode

d) To define new schemes

These new schemes, drawn up during the process, are characterized by:

- A co production of the solutions outsourcing transport and logistics by pooling the means and the organizations.
- An integrator: new actor (or grouping of actors).
- One/several platforms for densification/mutualisation.
- The adaptability of the transport with mixing “conventional and combined solutions”.
- One/several technical innovation(s): equipment, information system...
- A network of decentralized initiatives outcome to a territorial network with a shared national vision.
- Progressive implementation of the network and a rise in charge of the “network effect”.
- A railway market of inter territorial transport pulling.

- A railway actor buffer in between the industrial need for flexibility and the need for stable flows for the long distance railways' operators.

3. Practical consequences/applications

The practical consequences and applications are: the direct continuation of the IntermodBOIS project or the prolongations of the project.

Directly in bond with IntermodBOIS

- It means engaging the pilots, i.e. to carry out tests from the case studies with the involved actors.
- Via the pilots, it will be possible to test new solutions which were identified. The most advanced ideas which deserve to be applied: the big bag solution for the wood chips and some equipments (Innofreight could potentially adapted some equipment to the French needs).

Continuations: actions on territory and network

- In the Southern Morvan /East Burgundy, the public authority launches in April 2012, with the support of H-Log, a study on a platform (bimodal at least), to evaluate the relevance of one or two points of densification of streams.
- The willingness of H-Log/Objective OFP to create a more directed entity "operational business development assistance" with experts of the various fields of logistic transport.

One can also identify developments which would have to be undertaken to continue the action:

- Engaging studies for integrating the regional planning and the localization of the industrial activities: adequacy of resources/industrial activities/infrastructures/markets. For wood, continuing the analysis on forest roads, deposit areas, qualitative analysis of the regulation implementation (roundwood roads) with the forest; definition of criteria for optimizing the platforms and localisation of units (bioraffinerie in particular); adequacy of the equipments.
- There is a need for data calibration in order to support the railway initiatives. For the economic actors, it means having access to data on the networks, accessibility, costs, and flows. For the actors in charge of the infrastructures, it is a question of being able to have tools for monitoring and anticipating the needs.
- In order that the railways network starts, it will be necessary to count on an official support, from the State and local authorities. This support must be conceived to stimulate the local economic initiative, condition for a success.

4. Operations of valorisation

Two articles will be done (expected journals: La vie du Rail et Le Bois International). A seminar will be organized mid-2012. Moreover, the continuation of the project will be done through the expertise on the IntermodBOIS partners:

- H-Log/Objective OFP: accompaniment of the developments networks
- FCBA: continuation of research on the wood supply and biomass procurement (ANR, ADEME...), contacts with the professionals and researchers.