TEMPLATE

Output factsheet: Strategies and action plans Version 1

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Summary description of the strategy/action plan (developed and/or implemented)

Following the order of the main topics of the TalkNet project (T1 and T2), Zailog has developed two action plans. The first one is focused on the multimodality (WPT1) while the second on the eco-innovation (T2). Both describe the future actions that will be implemented in the node of Verona. In the first action plan, the main tasks are to produce a feasibility study about the upgrade of the Verona's terminal (called "fourth module") and to activate a new railway shuttle service among Verona and Venice. These two actions will be completed throughout the deployment of the two pilot actions. On the other hand, the second action plan is not directly linked to a pilot action since Verona is more focused on the multimodal thematic. However, the implementation of the improvements described in the second action plan are key issues that will be solved in the next future. In particular, the construction of a new LNG station will be completed in few years since the feasibility study is not completed yet. These two action plans use the results achieved through the knowledge tools to define an action strategy necessary to overcome the problems detected.
In the following lines, there will be a description of the four actions developed by Zailog. As said before, two actions regard two clusters of the first topic (T1 multimodality) and will be used to implement two pilot actions. On the other hand, the other two actions are linked to the second topic (T2 eco-innovation) but are not linked to a pilot action.

Cluster 1 – Last mile connections of multimodal nodes. As research and development center of the Verona freight village, Zailog is developing the extension of the terminal area in close cooperation with the bigger players of the multimodal chain like RFI (the Italian railway infrastructure manager), Consorzio ZAI (the infrastructure manager of the Verona freight village) and the municipality of Verona. This new infrastructure is necessary to face the growing railway freight traffic arriving at the Verona node that will have a significant increase after the Brenner Basis Tunnel (BBT) opening in 2026. This terminal extension will raise in the north of the inland terminal area, very close to the dedicated railway station of the node and to the Milan-Venice railway line.

The scope of this action is to exploit the area currently occupied by the automotive sector to strengthen the terminal area, enhancing both the railway capacity and the overall efficiency. Therefore, it will be necessary to move the automotive sector in the south of the inland terminal area to recover enough space to build this new infrastructure. The main reason why this new terminal is necessary is to handle trains 750 meters-long. In fact, after the BBT opening longer and heavier trains will be able to travel on the railway line so the majority of terminals must be ready to receive these bigger vehicles.

The solution proposed with this action is to use the knowledge acquired through the analysis and the knowledge tools to create a strategy to implement the following action plan that is the creation of a feasibility study of the new terminal 750 meters-long. In this way, all the aspects linked to the last mile thematic analyzed in the previous phases of the project, will be faced and in the majority of cases, solved. For instance, thanks to the works to build the new terminal will be realized a new railway connection to the high speed and high capacity line, making the railway links of the node faster and increasing the load factor. All these aspects are the essential condition to achieve the target established by the European community that is to shift the 30% of the freight traffic from the road to the rail.

Cluster 3 – Assessment of multimodal services. The rail-road terminal of Verona is the first freight village in Europe, according the ranking drafted by the German association of the freight villages. This ranking is based on about 40 parameters including the services provided and the level of traffic generated. It means that Consorzio ZAI (the infrastructure manager of the Verona node) is working hard every day to reduce the issues and enhance the efficiency. For this reason, it is born the idea to activate a shuttle railway service between the inland terminal of Verona and the port of Venice. This connection has been thought to link the railway connections of the Verona freight village to the maritime trips of the port of Venice. Therefore, it is not an isolate shuttle service because the distance between these two nodes is too short to compete with the road.

The aim of this action is to decrease the high number of heavy vehicles on the Milan-Venice motorway, moving this amount of freight from the road to rail. The identification of the issues in the first part of the project is the ground on which this action is developed. In fact, the analysis made given an overview of the market situation, detecting the need to create a huge multimodal route starting from the Middle East and arriving in the Scandinavian countries (and vice versa) without the use of the road transport. Therefore, this action uses the results of the analysis to elaborate a plan of activities to do that will be implemented in the next action plan.

The upcoming action plan will be a market study focused in the activation of the railway shuttle service between Verona freight village and the port of Venice. All these project's steps are following a logical path that is driving the partners to the production of an output. The action described in this document will be the guideline to follow in order to overcome many problems affecting the multimodal chain, creating new multimodal connections.

Cluster 4 – Alternative fuels deployment. Zailog and Consorzio ZAI (the infrastructure manager of the Verona freight village) are working in close cooperation to the most important players in the area in order to build a LNG station that currently is missing. The aim is to create a new infrastructure able to answer to the increasing need of alternative fuels. In fact, fossil fuel is one of the main causes of pollution so the reduction of heavy vehicles powered by diesel will contribute to keep a low level of CO2 emission, pursuing the objective of a "greener" environment. For this reason, Consorzio ZAI followed the example of other competitors (like the inland terminal of Padua) and decided to realize a new area dedicated to a LNG station. Currently, there was only the identification of the area on which to build this station. However, the authorization process is not started so far and it will take a lot of time. This long lapse of time is due to the huge project in which the LNG station is involved that is to create a smart parking area for trucks. This zone will be equipped with variable message panels to provide specific information about the slots available in the terminal. In this way, the truckers will avoid long queues outside the terminal's gate, waiting in the parking area their turn. Then, the trucks powered by LNG will be able to refuel their tank.

Therefore, the scope of this action is to create a new infrastructure able to solve different problems like the long queues outside the terminal's gate, the congestion in the terminal area that causes useless

gantry movements and the raising level of CO2 emissions. The upcoming infrastructure will be the key to face different negative aspects that are causing the pollution in the node and in the surrounding areas.

The action described in this document is based on the findings of the previous analysis. The problems and the issues detected have been evaluated in order to identify the proper countermeasure using a particular tool, the best practices. The result was a production of knowledge tools that are documents containing all the problems and the best practices mentioned. The aim of the document is to provide all the "tools" to define a specific action that is necessary to overcome the problematic aspects that are hampering the regular execution of the daily activities. As mentioned above, Zailog has not developed an action plan in this cluster but the action developed in the following paragraphs will be probably deployed after the end of TalkNET.

Cluster 5 – Energy efficiency solutions. The forecasts about the railway freight traffic are showing a positive trend for the next years because is expected an increase of the volumes moved on the Brenner axis. This raising flow of traffic will provoke several consequences on the Verona node like the risk of congestions inside the terminal area. For this reason, Consorzio ZAI is working with RFI (the Italian railway infrastructure manager) and the municipality of Verona to build a new terminal that will provide more capacity, changing the layout of the railway sector of the entire freight village of Verona. However, these works will be finished in 2026 when there will be the opening of the Brenner Basis Tunnel. In the meanwhile, it is essential to optimize the operative process to enhance the overall performance of the node. The benefits produced by the reorganization of the terminal operative process will not only increase the capacity available, reducing the congestions and the costs. In fact, it will cause also a reduction of waste of energy since an improved handling process will allow a decrease of gantry lifts and movements.

For this reason, the aim of this action is to replicate the handling process currently used in Interterminal (the smaller terminal in Verona freight village) inside Terminali Italia (that is the bigger one). It is not simple because Terminali Italia has more daily connections than Interterminal but some aspects can be improved to reduce the congestions and to decrease the employ both of the equipment and of the personnel. In addition, the action is concentrate in the promotion of a new way to make business, more focused on the overall aspects of the production than only on the profit. This different behavior can foster the reduction of the environmental impact, giving the opportunity for the customers to choose between traditional and "green" products. However, it is not foreseen an action plan since the deployment of the action needs the release of many laws and rules that will be ready only after the end of TalkNET.

The action developed in the cluster 5 has its roots in the analysis carried out at the beginning of the project. In fact, the problem and the need detected are the targets on which the action is focused. Therefore, the scope of this document is to provide solutions to overcome the majority of these inefficiencies, following the examples given by the best practices described in the knowledge tools. The output of the action can be used to deploy further action plans that could be implemented after the end of the project.

NUTS region(s) concerned by the strategy/action plan (relevant NUTS level)

The actions described in the documents will have an impact on the surrounding NUTS regions. The actions of the first document will have an impact on the ITH north-east region, AT1 East Austria, AT2 South Austria, AT3 West Austria, DE2 Bavaria, DE6 Hamburg. The impact will be reach other northern NUTS regions but currently it is not possible to identify them precisely. The actions of the second document have an impact more connected to the surrounding areas, especially ITH north-east region, ITC north-west region, ITI centre region. However, the effects of these action will be spread also in the northern countries, especially Austria and Germany.

Expected impact and benefits of the strategy/action plan for the concerned territories and target groups

Both the action plans will produce an impact on the regions abovementioned. In the first one, the new railway module will be able to increase the efficiency of the entire multimodal chain covered by the connection of the node of Verona. In fact, the upgrade of the terminal will allow flows of longer and heavier trains on the Brenner axis, reducing the number of trucks on the road with the consequent benefits. In addition, the railway shuttle service between Verona and Venice will generate the same results of the previous action but it will be focused more on another multimodal route, starting from Turkey and Greece and finishing in the north of Europe. On the other hand, the actions described in the second document aim to reduce the environmental, using alternative fuels or implementing new handling techniques. The results will be a decrease of the CO2 emission, of the energy consumption and of the negative externalities burden on citizens.

Sustainability of the developed or implemented strategy/action plan and its transferability to other territories and stakeholders

The described actions will be deployed thanks to the financial resources of the main actors involved. In particular, the new railway module will be realized thanks to the investments of Consorzio ZAI, the Municipality of Verona and the Italian railway infrastructure manager (RFI). The second action based on the implementation of a new railway shuttle service between Verona and Venice will be completed thanks to the investments of the players of the multimodal chain like the railway undertakings, the MTOs, the shunting companies, the terminal managers and the dispatchers. In addition, the LNG terminal will be build thanks to the financial resources of Consorzio ZAI, of the Municipality of Verona and of an important player operating in the fuels market named ENI. Lastly, the improved way to manage a terminal will be deployed thanks to investments of the terminal managers operating in Verona.
All the actions described can be transferred on other realities. In particular, the new module to handle trains 750 meters long it is a good practice that will be used in several European terminals since the national railway infrastructure managers of the different countries are upgrading the entire network in order to carry more goods using longer and heavier trains.

Lessons learned from the development/implementation process of the strategy/action plan and added value of transnational cooperation

The action plans developed by Zailog show that the cooperation is the key to reach the highest performance. In fact, all the actions described in the documents are the result of steady contacts among the actors of the chain. Only through a comparison of the expertize and of the ideas, it is possible to identify the common issues affecting a specific area and to detect the proper countermeasures to erase or reduce their negative impact. The same “modus operandi” will be used in the implementation of the pilot actions since their deployment will start with some stakeholder meetings necessary to achieve a common definition of the entire action. This method will generate a positive impact both for the local players and for the other countries since a better communication along the entire chain would allow a smoother exchange of data with a consequent reduction of the inefficiencies.
In particular, Zailog would implement a city logistics system following the example of the Freeport of Budapest. In fact, the action developed by PP8 is very interesting since permits to create an urban network to deliver the goods using electric vehicles. The increasing dissemination of these type of vehicles is extending the area with charging stations inside and outside the city area. Therefore, in the next years the freight village of Verona will be able to develop this project thanks to guidelines provided by the Freeport of Budapest and to the improve of the network.

References to relevant deliverables and web-links
If applicable, pictures or images to be provided as annex

The deliverables used to produce the action plans are:
- D.T1.2.5 Analysis on multimodal nodes efficiency and connections;
- D.T2.2.5 Analysis on ECO solutions deployment;
- D.T1.5.1/D.T2.5.1 Methodology for action plans development;
- D.T1.5.6 – Action plans to improve multimodal nodes efficiency and connections – VERONA FREIGHT VILLAGE
- D.T2.5.6 – Action plans on eco-solutions deployment – VERONA FREIGHT VILLAGE