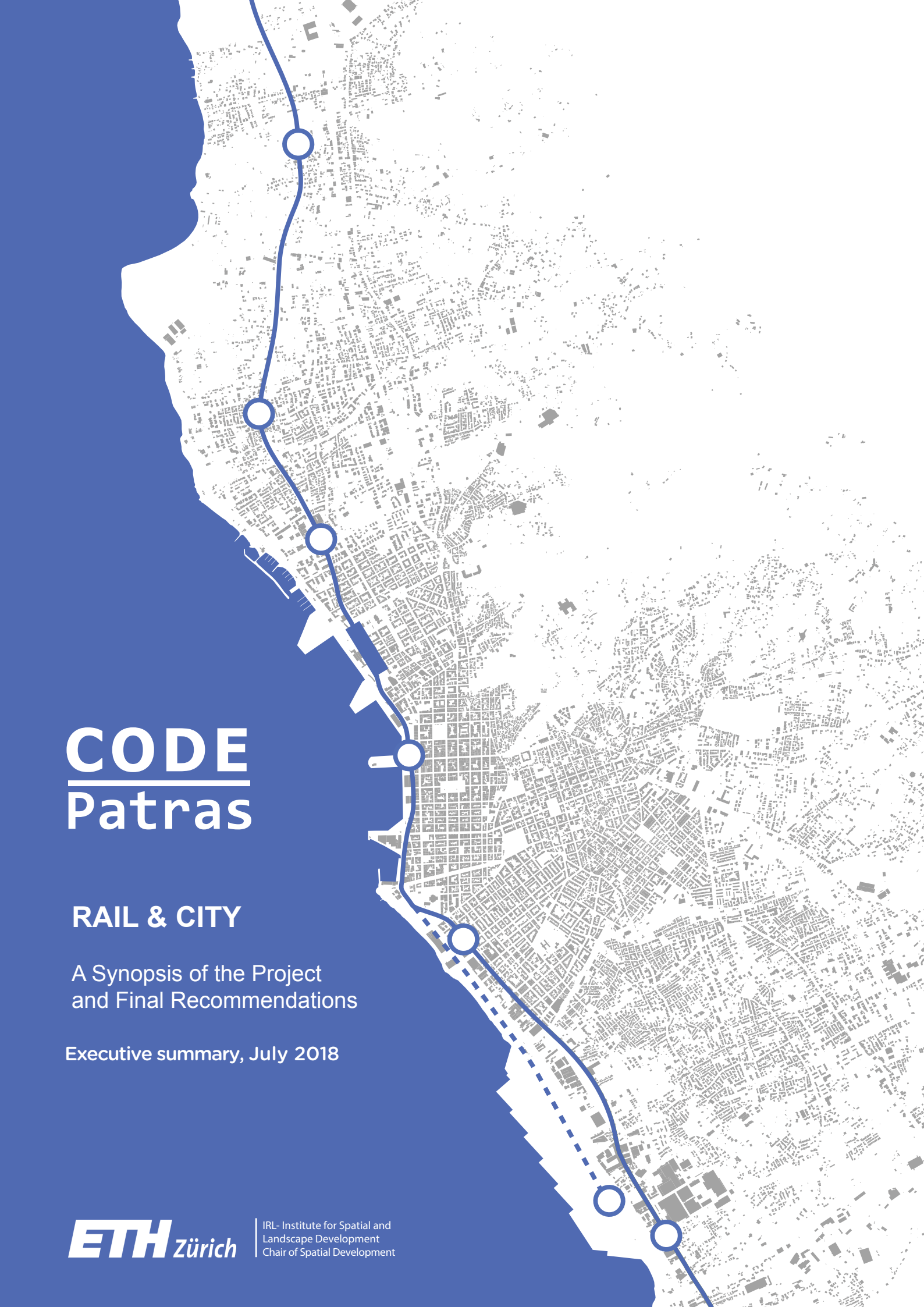

CODE Patras

RAIL & CITY

A Synopsis of the Project
and Final Recommendations

Executive summary, July 2018

ETH zürich
IRL- Institute for Spatial and
Landscape Development
Chair of Spatial Development

1 Introduction

The construction works of the railway connection between Athens and Patras, as a component of the Orient/East Med. Corridor and the PATHE corridor (Patras-Athens-Thessaloniki-Eidomeni) on national level are underway. Within the next five years the new railway line will be completed until the suburbs of the city of Patras.
However, the study for the final section Rio (Bozaitika) – Patras (New Port) has not been completed and submitted yet, since the discussion towards three scenarios – the bypass, the tunnel and the ground level solution - is still open. This unsolved question leads to the possible outcome, that the main railway station of Patras, the third largest city in Greece, will be located for many years in the outskirts of the city.
This situation would endanger the success of the railway as alternative mean of transport between Athens and Patras, and jeopardise the funding of the whole line, since it is funded as a connection between the two core ports and main railway stations of those cities.

To overcome the dilemma of prolonged public discussions between the tunnel and bypass options, with estimated costs between 700 Mio. and 1 Bio. €, an informal planning method, called the Test Planning Process, was conducted in 2014-15 to test alternative solutions. Briefly put, this method is used for creating concrete and feasible proposals and solving the challenging tasks in spatial planning.

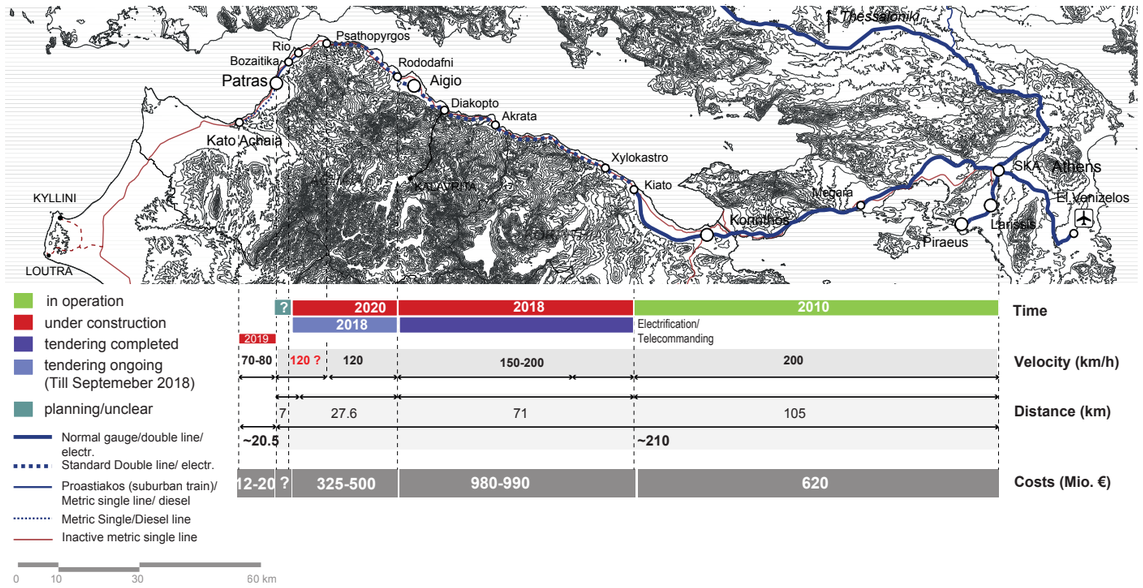

Fig.1: The current conditions and provisioned time framework and projects between Athens-Patras, (source: ETH, IRL, TP, IT).

2 The initiative of Code Patras

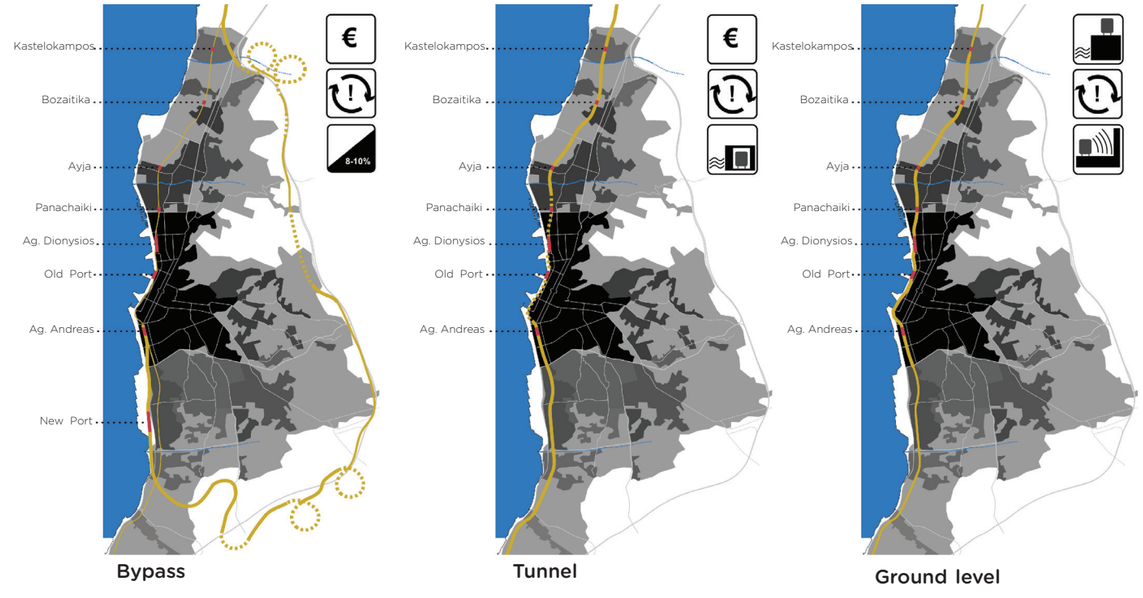

Fig.2: Scenarios in public discussion of railway development in Patras, (source, ETH, IRL, IT).

The Test Planning Process is integrated into the broader project of Code Patras, both initiatives of the University of Patras, the National Technical University of Athens and ETH Zürich in order to explore alternative scenarios of simultaneous rail and city development in consecutive steps.
Regarding the Test Planning Process itself, four international planning teams from Greece, Switzerland and Germany provided new strategies for a comprehensive railway and infrastructure development under the supervision of the Steering Committee consisted of interdisciplinary experts. The recommendations of the Test Planning Process formulate a feasible solution for the integration of the new railway line into the city of Patras and the new port with simultaneous urban and landscape development. This solution is based on the premises of minimal use of financial resources as well as the possibility of stepwise development. The key findings were:

- The ground-level solution is a feasible and sustainable solution for both, transport and city development in Patras.

- All actions should aim in reaching the city centre of Patras and the port at the earliest possible moment to use the full potential of the line as passenger and freight-connection.

- The service of Proastiakos (suburban train) should be preserved, even during the construction phase.

- The location of the former depot of Agios Dionysios as the new main station is crucial for the success of the railway line and further city development.

Besides the elaborated recommendations, the Test Planning Process provided a modest form of networking as it encouraged different stakeholders, i.e. the OSE and the ERGOSE to join the process. Representatives from these organizations, who held opposing positions at the beginning, converged towards a common solution at the end.
However, the discussion of this solution showed, that different options of the proposed alignment should be discussed in order to improve the integration of the railway into the partially densely populated urban areas.

More information about the Test Planning Process:

http://www.codepatras.ethz.ch/download/joint_seminar_week/CODE%20PATRAS_Report%20of%20results_ENG.pdf

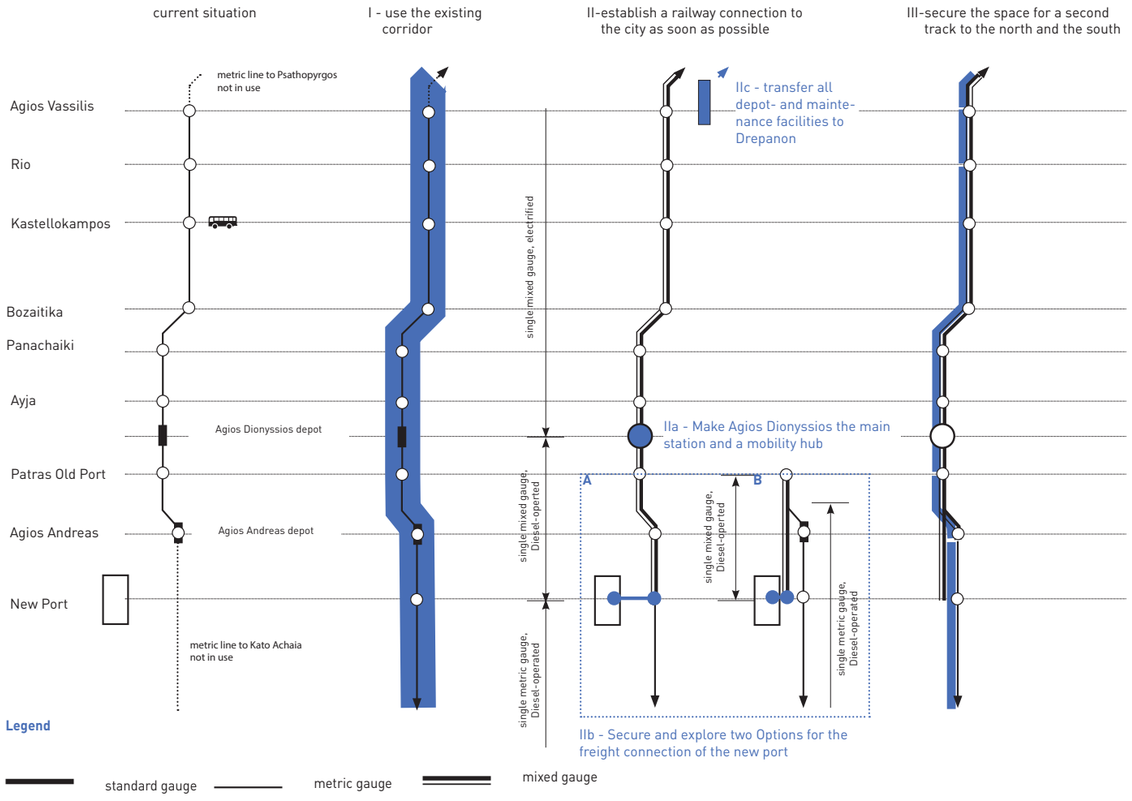

Fig.3: Development steps of the railway infrastructure in Patras, (source: TPP 2015).

3 Synopsis and assessment of the ground level solution

Fig.4: The property of Agios Dionysios, (source: V. Pappas).

The proposed ground level solution sets some open questions, that should be discussed further. To foster this, a synopsis of the latest discussed options was elaborated in order to prove the feasibility of the ground level solution in a more detail. In the following assessment three crucial topics were explored to provide valuable insights into future discussion:

- The integration of Agios Dionysios station into the city fabric has to be tested further regarding also possible enhancements.

- The line crosses one of the most densely populated areas within Peloponnese region. The recommended proposal is optimal in terms of limited financial means and therefore offers no flanking measures to reduce the negative effects of this intervention.

- The connection to the new port of Patras illustrates still different possibilities, which have to be clarified.

The preliminary assessment of the station area showed, that there are feasible and recommendable alternatives for the new main railway station in Agios Dionysios. Instead of the complete-tunnel solution, these options can be developed stepwise and therefore are flexible towards future development. The existing height differences offer a possibility to connect the station with the city and the port area – which could be transformed into a ferry and cruise ship terminal and an attractive waterfront. Moreover, if the former station building cannot be used, other possible space for the station building facilities is indicated, while the relocation of maintenance facilities can save some space for urban development (see Fig. 6). However, especially in the city centre of Patras some additional measures of integrating the railway better into the urban fabric might be worth taken into consideration. To choose the right option is not only a matter of technical assessment, but a discussion orientated in the light of the time framework and the available financial means.

4 Recommendations

The synopsis of CODE Patras project defines the framework which is the basis for the following discussion.
In order to achieve the goal of reaching the city centre of Patras as soon as possible, it is highly recommended to restart planning and negotiating actions. In this process, representatives of the community, the region, the national transportation ministry, the railway and preferably also the EU should participate. In this way, a joint decision can be prepared.
As one important condition, the decision of the principal layout of the railway solution within Patras has to be taken soon.

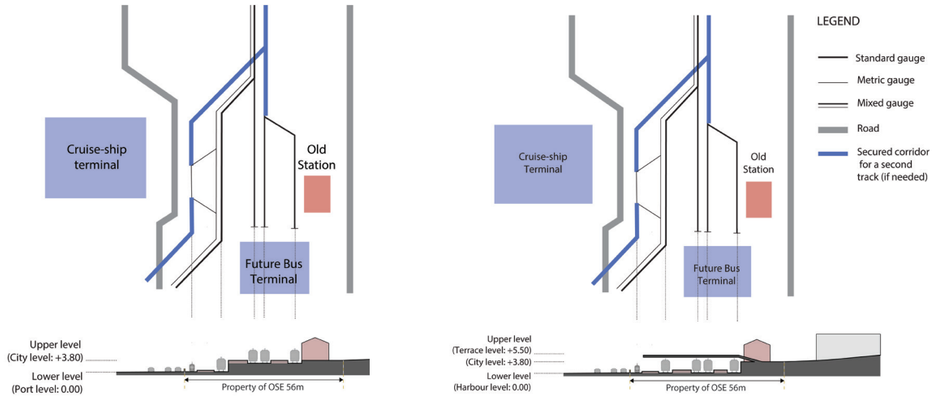

Fig.5: Two of the assessed station layouts, the "split-level solution" and the "harbour-level solution", (source: ETH, IRL, IT).

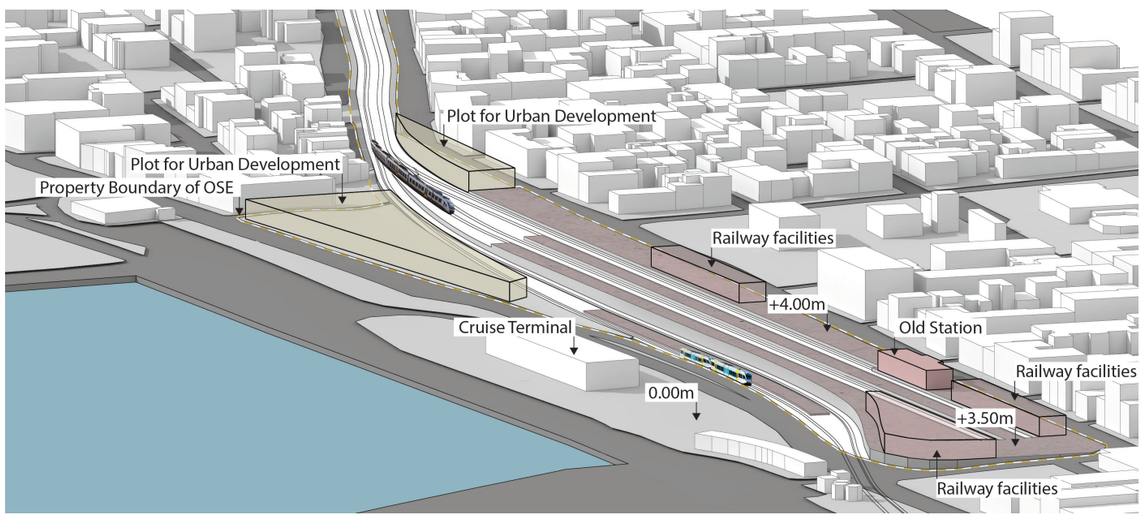

Fig.6: Visualization of one of the possible station layouts (here: the split-level solution) (source: ETH, IRL, IT).

Regarding the given time frame of the EU Funding Programme a study of the alignment until Agios Dionysios should be conducted as soon as possible in order to foster this decision. All the other steps southern of Agios Dionysios should be planned and designed with the necessary thoroughness (see Fig.7).

The EU could support this process in additional flanking measures and alignment options, which can reduce the impact of the new railway line in the densely populated areas. In addition, it could support the option of a possible extension of the railway towards the south by offering alternative ways of funding for metric gauge railway lines.

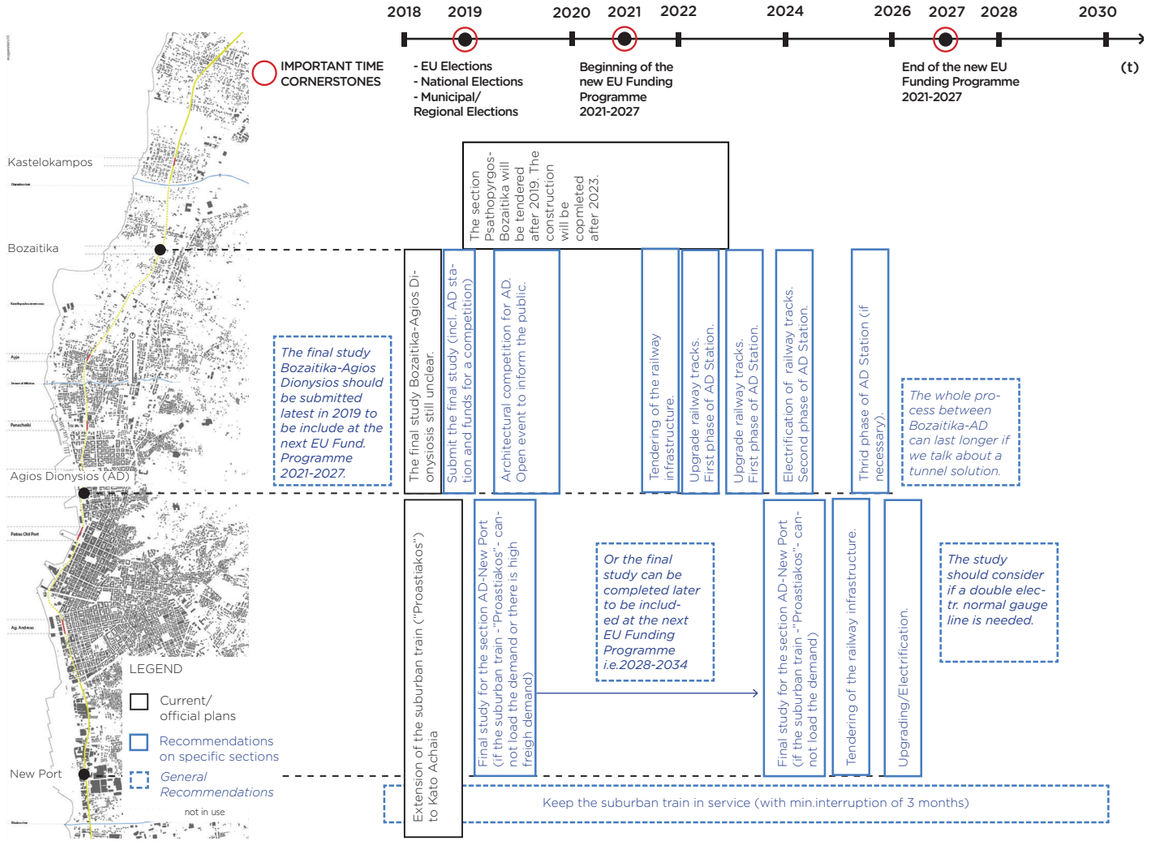

Fig.7: Time framework of the current plans/ announcements and recommended actions, (source: ETH, IRL, TP).

For more information:

- The extended version of Code Patras synopsis: Scholl, B., Nollert, M., Papamichail, T. (2018) Code Patras - Rail & City - A Synopsis of the Project and Final Recommendations, Zurich: ETH Zurich, Institute for Spatial and Landscape Development *(forthcoming)*.
- Scholl, B., et al.(2015) Code Patras - Rail & City - A Test Planning Process for Patras. Zurich: ETH Zurich, Institute for Spatial and Landscape Development.
- www.codepatras.ethz.ch

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