AKADEMIE FÜR RAUMFORSCHUNG UND LANDESPLANUNG

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## The Importance of Informal Planning in Greece

URN: urn:nbn:de:0156-0952151



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S. 291 bis 305

Aus:

Scholl, Bernd; Perić, Ana; Niedermaier, Mathias (Eds.) (2019): Spatial and Transport Infrastructure Development in Europe: Example of the Orient/East-Med Corridor. Hannover. = Forschungsberichte der ARL 12.



#### Irini Frezadou

## 15 THE IMPORTANCE OF INFORMAL PLANNING IN GREECE

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#### **Abstract**

The long lasting unsolved spatial problems and the lack of a sustainable integrated transport system in Greece indicate the insufficiency of the formal planning procedures. For such complex problems, the complementary use of informal processes, like the test planning process, is especially useful. In 2015, at the initiative of ETH Zurich, three European universities (ETH Zurich, University of Patras, and National Technical University of Athens) collaborated on the pilot implementation of the test planning process revolving around the issue of the railway and spatial development in Patras, the third largest city on the Peloponnese. Such an attempt to use informal planning methods in the rather conventional milieu of Patras was directed towards creating a new planning culture in Greece. Furthermore, such a European project that enhances international cooperation and the transfer of know-how finally leads to the strengthening of European cohesion, a vital goal of any international project.

## Keywords

Transport – spatial development – formal/informal planning – test planning process – planning culture – Patras – Greece

## Die Bedeutung informeller Planung in Griechenland

## Kurzfassung

Die seit langem ungelösten raumplanerischen Probleme und das Fehlen eines nachhaltigen integrierten Verkehrssystems zeigen, dass die formalen Planungsverfahren in Griechenland unzureichend sind. Bei derartigen komplexen Problemstellungen ist die Integration informeller Prozesse, wie z.B. Testplanungen, von besonderem Nutzen. Im Jahr 2015 arbeiteten auf Initiative der ETH Zürich drei europäische Universitäten (ETH Zürich, University of Patras und National Technical University of Athens) an der versuchsweisen Umsetzung einer Testplanung rund um das Thema Eisenbahn und

Raumentwicklung in Patras, der drittgrößten Stadt auf dem Peloponnes. Dieser Versuch, informelle Planungsmethoden im eher konservativen Milieu von Patras zu nutzen, zielte darauf ab, eine neue Planungskultur in Griechenland zu etablieren. Darüber hinaus führt dieses europäische Projekt, das die internationale Zusammenarbeit und den Know-how-Transfer fördert, schließlich zur Stärkung des europäischen Zusammenhalts als wichtigem Ziel internationaler Vorhaben.

#### Schlüsselwörter

Verkehr – Raumentwicklung – formelle/informelle Planung – Testplanungsprozess – Planungskultur – Patras – Griechenland

#### 1 Introduction

Greece is situated at the crossroads of three continents and the intersection of Asian and European trade routes. At the same time it is a southeastern European gate for Asia and Africa, as well as a gate for Europe to the Middle East. In addition, the metropolitan region Athens-Piraeus is the southernmost node in the trans-European railway axis of the Orient/East-Med Corridor stretching from Hamburg to Athens.

In the entire history of Europe and its spatial development, this route has formed a quasi-southeastern backbone. Densely settled areas of Europe are to be found here along with diverse landscapes and urban regions of various sizes. Nowadays, the ongoing massive refugee crisis, the constantly deepening socio-economic gap between northern and southern European countries and the massive brain drain of the countries of southern Europe are leading to a peak in the existing conflicts at European level which is inevitably linked to the cultural and political history and the future of the entire continent

One could say that in our days, the Orient/East-Med Corridor with its 'regions of influence' is the political 'barometer' on which European cohesion can be tested and evinced. Therefore, the promotion of strategic approaches for integrated transport and spatial development policies at European level is now of great importance.

Regarding the quality of the transport infrastructure along the corridor, there is a significant north-south gap. In the Balkan countries and in Greece, insufficient railway connections and the lack of an integrated transport system mean that passenger and freight traffic is mainly concentrated on air and road, with the subsequent spatial, economic and environmental consequences. For example, concerning cross-border passenger traffic, a rail trip from Vienna to Athens (1,700 km) requires 40 hours, while for the somewhat longer stretch from Vienna to Barcelona (1,800 km) it takes 21 hours or about half the time (Scholl 2016).Only a few individual travelers would take the train for the full distance; however, the comparison shows how underdeveloped the rail-system is at this time in southeast Europe.

The future transformation of the Orient/East-Med Corridor and the subsequent upgrade of its southern part (Vienna–Athens) will heavily influence European evolution. Major investments of all kinds, from airports and railway systems to distribution cen-

ters and industries, etc. will be significant. The renewal and development of its regions and the correction of the existing north-south gaps is very much a large and overall European challenge.

## 2 The need for an integrated transport system in Greece

The current socio-economic crisis in Greece also offers new opportunities for sustainable spatial development and the amelioration of the official transport policy which has been implemented to date. In recent decades, priority has been given to public investments concerning the road network at the national and regional levels as well as also at the city and community level.

In the public transport sector, the network of regional buses (KTEA) has been remarkably extended and ameliorated (Company Profile 2017). The investments by the Greek government and the European Union (EU) made in the Greek railway network in the last decade have not yet delivered the expected positive effect at the national and regional levels. The prevailing transport model does not promote sustainable spatial development, but enhances greenfield development and urban sprawl throughout the country.

Nevertheless, the current bleak socio-economic conditions are also related to an ongoing population movement that may augment its impact in the next few years and could be the basis for future sustainable spatial development at the national level. The recent migratory tendency deals with internal decentralization movements owing to increasing poverty and unemployment in the urban areas. Nowadays, in contrast to the internal migratory movement of the 1960s, Greek citizens are moving from the metropolitan areas of Athens and Thessaloniki towards rural areas or to the villages of their origin, expecting to find a way-out from a long period of unemployment (Chroianopoulos/Pagonis/Koukoulas et al. 2010). Therefore, the first positive impact on the agricultural sector is already visible. The export of agricultural products has risen constantly 7.0% every year since 2008, reaching 7.6% in 2016 (Greece – Agricultural Sector 2017).

The sustainable development of Greece demands a new, integral socio-economic model, with priority being given to the internal economic reconstruction of the country. This means that the focus should be on small and medium-sized national enterprises in order to facilitate the production, distribution and export of Greek products of the primary and secondary sector (agricultural, as well as high quality technological products, etc.). Tourism should be a subsidiary source of income for the country, and by no means the main income source as nowadays, i.e. 19.7% of total GDP in 2017 (WWTC 2018). Based on the great comparative advantages of ancient and modern culture, climate and unique topography which Greece offers, the qualitative and not quantitative increase of touristic enterprises of national interests, through e.g. small and medium-sized enterprises and thematic tourism, should be promoted. External mega-investments in all sectors should be of the lowest priority, if not avoided altogether.

With the above in mind, the development of national transport infrastructure, i.e. the railway network in synergy with the functional optimization of the main Greek ports (Piraeus, Thessaloniki, Patras, Volos, Igoumenitsa, Alexandroupoli), is of great importance for the economic redevelopment of Greece. In the Athens agglomeration, i.e. in the Athens Urban Area, which includes the regional units of Great Athens (North, West, Central and South Athens) and Great Piraeus, there are three most important nodes:

- 1 The Central Railway Station of Athens (*Stathmos Larissis*), which despite the recent electrification (finished in July 2017), due to the poor architectural quality of the building itself, the low urban design quality of the surrounding area and the lack of intermodal connections, still remains of marginal status regarding its significance as a main transport hub in the metropolitan area of Athens. Namely, there are only 146 local and regional trains/day passing through Stathmos Larissis (TRAINOSE 2018) and, due to the low occupancy of the trains, a rough estimation suggests a maximum of 10,000 passengers/day, i.e. max. 3 million passengers/year.
- 2 In contrast, Athens' Eleftherios Venizelos Airport served 21,736,466 passengers in 2017 (AIA 2018), which is approx. three times the country's population.
- 3 The maritime main transport hub in the metropolitan area of Athens is the port of Piraeus. In terms of passenger transportation, with its 17 million passengers in 2017, it is the largest port of Europe and the third largest in the world (PPA 2018). Regarding freight transport, in 2012 the hub deal between Hewlett-Packard, COS-CO (China Ocean Shipping Group Company) and Trainose (since 14.09.2017 part of FSI Ferrovie dello Stato Italiane, the Italian national railway company) raised the significance of Piraeus among the European ports (southern European maritime gate) and illustrates the ongoing geopolitical transformation in the east Mediterranean region resulting from the shifting of global trade routes to Asia (due to activation of the New Silk Road).

Thus, these changes are increasing the geopolitical importance of Greece, transferring the country from a peripheral position to the heart of the trans-European transportation networks and creating potentials for internal economic development. Integration within the international transportation infrastructure network will support economic, social and political stability in Greece as an important European stability factor in the present instable environment of the southeast Mediterranean.

It is exactly this nodal geopolitical condition that exemplifies both the important international role of Greek ports in general (Piraeus, Patras, Igoumenitsa, Volos, Alexandroupoli), as well as the need for an active railway system, unifying them and moreover connecting them with the rest of the European continent. More specifically, the integrated development of the Greek railway and maritime freight transport is completely in the European interest, because through the transfer using the abovementioned Greek harbors, the northwest of Europe can be relieved from interior transport to the northern range, Rotterdam, Antwerp, Bremen and Hamburg (Scholl 2016: 19).

Development based on the collaboration between road, air, railway and sea networks is crucial to support the position of Greece in this new era. Providing an integrated transport system both at the national and regional levels will be of great importance for the economic rehabilitation of the country. This system as a backbone can serve the micro- and the macro-economy of the country. To implement this task as an action plan, it is urgently required that all relevant authorities should coordinate and cooperate at the national, regional and European levels. The integrated development of Greek transport infrastructure has to be evaluated not only as a matter of national and regional interest, but more likely as part of an extended international network of transport relations. In a more global context it may be described as part of a major worldwide economic and political 'puzzle' that has to be resolved as soon as possible in order to contribute to European cohesion and stability.

## 3 Spatial planning in Greece

Spatial planning in Greece is carried out at three levels: national, regional and local. The urban, spatial and transport planning methods used do not promote sustainable urban and spatial development. The massive financial crisis and the related continuous socio-political instability are connected to the lack of a long-term perspective by the planning authorities. The decision procedures are numerous and unclear, and – like the prevailing planning horizon of the public authorities – are interlinked and influenced by political decisions and the election periods of the politicians (4 to 8 years) (Chroianopoulos/Pagonis/Koukoulas et al. 2010). In fact, decision-making, mostly carried out by the politicians without the serious advisory involvement of planning experts, is still very centralized.

The spatial planning framework is complex and characterized by a rigid top-down approach that lacks clarity and efficiency in the implementation of the set goals (Nagy/Nagy/Timár 2012; Giannakourou 2011). Moreover, there is a lack of communication, cooperation and coordination among planning authorities of different levels (national, regional, metropolitan, municipality) as well as between the representatives of the public and private sectors (Chroianopoulos/Pagonis/Koukoulas et al. 2010). In the cases where a Memorandum of Understanding for Cooperation among planning authorities is signed, there are no common planning processes involved. The representatives of the planning authorities involved participate in the procedures with their hidden agendas and a deep and chronic mutual mistrust regarding the intentions and planning skills of those involved.

In general, spatial planning is more oriented towards the production of individual final plans (e.g. master plans) than towards pursuing a continuous and integrated planning process (Giannakourou 2011). Backstage of the long-term unsolved complex spatial problems (e.g. the railway network in Patras) is mostly a 'battle' between the secret planning of each authority. In other words, a lot of strategic plans exist, but there is no strategic planning in Greece. For example, the new Structural Plan for Attica/Athens 2021 – SPA 2021, prepared by the planning department of the Ministry of Spatial Planning (YPEN), which is responsible for the elaboration of the Master Plans of Athens

and Thessaloniki, includes numerous thematic and spatial goals, but no structured proposal regarding implementation methods.

Finally, there is a lack of action plans and methodological instruments for the implementation of the thematic and spatially defined goals. Moreover, it is worth mentioning that no land register covering the whole of the Greek territory exists as yet.

## 4 Informal planning methods: Test planning process

The 'test planning' method belongs to the group of cooperative scientifically based planning methods and is especially suitable for difficult and complex tasks that involve many interest groups (Scholl 2011). The method actually goes back to the so-called Vienna Model, a proposal which was developed in the 1970s after massive flooding of the Danube river that caused considerable damage to the bankside areas of Vienna. The planners realized that their traditional methods would fail because the areas affected and the number of interest groups were much too large.

In recent decades, this principal planning approach was further developed to the well-known test planning process (TPP),<sup>2</sup> which in recent years has established itself in Switzerland (Scholl/Vinzens/Staub 2013), Germany and Austria. Through the EU project PROSIDE, TPP experience has also been gathered in Italy (Milano) and Hungary (Budapest).

The core concept of TPP is to set the solution process in motion through the exchange of ideas and discussion of their advantages and disadvantages in a framework organized according to specific principles, and then to draw conclusions from this process (Scholl 2017). One main difference between the test planning process and other traditional planning processes is that the competition is among the ideas delivered and not among selected planning teams. The expected outcome is not the selection of one proposal from those presented, but the constructive combination of the various elements of each proposal into a final recommendation document. This is one of the final tasks of the TPP Steering Committee (Scholl/Vinzens/Staub 2013).

The key factors which make the implementation of TPP valuable for Greece are:

- 1 The clear separation of political from professional decisions between the Executive and the Steering Committee.
- 2 The establishment of a discussion and decision culture (unanimous decisions if possible).
- 3 The communication of the planning results to all target groups (involvement of bottom-up processes).

<sup>1</sup> The Vienna Model was initially developed by the then ETH Professor Jacob Maurer.

<sup>2</sup> Further theoretical and empirical elaborations of the Vienna Model, and thus its growth into the test planning process, was mainly conducted by Professor Maurer's successor, also an ETH Professor, Bernd Scholl.

## 5 Test planning process in Patras (2015)

## 5.1 The main problem and task of the test planning

The 210-km long railway connection between Athens and Patras is part of the core network of the Trans European Network (TEN-T) and is therefore of regional, national and European importance. The new (under construction) double electrified standard gauge railway route runs outside the cities and villages and led therefore to extended greenfield development in northern Peloponnese.



Fig. 1: The railway system in Greece / Source: ERGOSE 2018, George Pantelas 2015

Subsequently, this infrastructure project, not yet integrated in the regional and local transport system and related to high expropriation costs, boosted enhanced urban sprawl and the continuous devastation of precious landscapes in the area. Moreover, it contributed to the deterioration of the existing metric railway system. It is worth mentioning that part of the old metric railway system on the Peloponnese was renovated in 2009, partly with EU funding, but the whole network closed in 2010/2011 – a tremendous waste of time, energy and financial resources.

Moreover, the city and harbor of Patras (an important maritime gate of Greece to western Europe), after millions of invested financial resources from the EU and national funds, is still not connected by railway with the Greek capital due to a lack of coordination among the responsible planning authorities. Today the railway connection from Athens stops in Kiato (Fig. 1) and the current state of the work is as follows: the 71-km part of the route Kiato–Rododafni (budget 920 million euros, electrification and telecommanding costs not included) is still under construction, although the construction period was supposed to last from 2006 to 2016; along the Rododafni–Psathopyrgos section the tracks were under construction until August 2018, while electrification and telecommanding remains in the tendering process; and the tendering process for the Psathopyrgos–Rio section is set for August 2017 to August 2020 with electrification and telecommanding not included (ERGOSE 2018).

Since 2010, when traffic on the old metric railway system on the Peloponnese was interrupted, various solutions for the railway connection of Patras were proposed by the responsible stakeholders (underground, semi-underground, surface and bypass solutions). The official master plan of the City still includes the underground alignment which was rejected in 2011 by the EIB (European Investment Bank) as a non-bankable solution. Currently (January 2018), the 10-km railway connection between Rio and Patras still remains an unsolved planning problem although 2022 was set as the expiry date by the EU for the railway connection of the new harbor of Patras.

## 5.2 The organization of the test planning process in Patras

In 2012, upon the initiative of the Swiss Federal Institute of Technology (ETH Zurich), a collaboration with the University of Patras and National Technical University of Athens was launched and aimed to find a solution to the abovementioned problem. After a series of preparatory events, it was decided to proceed with a pilot implementation of the test planning process (Fig. 2). The financial means for this step were provided by ETH Zurich as part of a special research project that wanted to obtain valuable experience for the further development of this method. This support also guaranteed that the test planning would be conducted independently and without prejudice.

The testing and adaptation of this collaborative planning method in the Greek planning environment was a great challenge. Despite continuous efforts to inform and involve the responsible stakeholders – OSE (Hellenic Railways Organization), ERGOSE (OSE branch for infrastructural development), the Municipality of Patras, and OLPA

(port authority), they participated only partially in the 6-month planning process. The absence of representatives of the Executive Committee forced the members of the Steering Committee to adapt the TPP according to a new organizational schema (Fig. 3).



# Communcation with the Public

Continuing communication: press release/publication, invitation and information of the stakeholders

#### Steps of the Test Planning Process in Patras

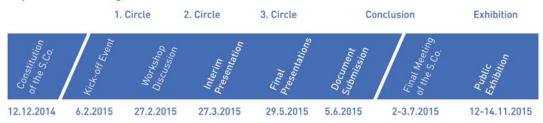


Fig. 2: Overview of the test planning process in Patras / Source: Scholl/Signer/Frezadou 2015: 13

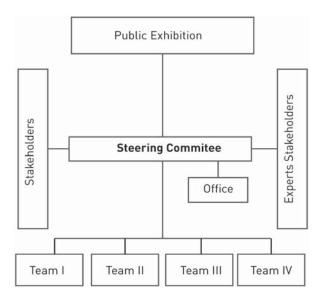


Fig. 3: Organizational structure during the test planning process in Patras / Source: Scholl/Signer/ Frezadou 2015: 13

In the first half of 2015, after the preparation of the task mission, eight international independent planning experts of the Steering Committee guided four highly qualified teams from Greece, Switzerland and Germany through the core part of the TPP, namely the preparation and presentation (in two phases) of their planning proposals. In June 2015, the Steering Committee completed the final document called Recommendations (a synthetic combination of the notable elements of the four proposals) and presented it to the board of directors of OSE. The TPP Steering Committee recommended an integral approach and stepwise development of a railway connection on the existing alignment (surface solution) as the solution with the most added value for the City of Patras. The abandoned Agios Dionyssios Station in the north of Patras is proposed as the New Central Railway Station of Patras (Fig. 4).

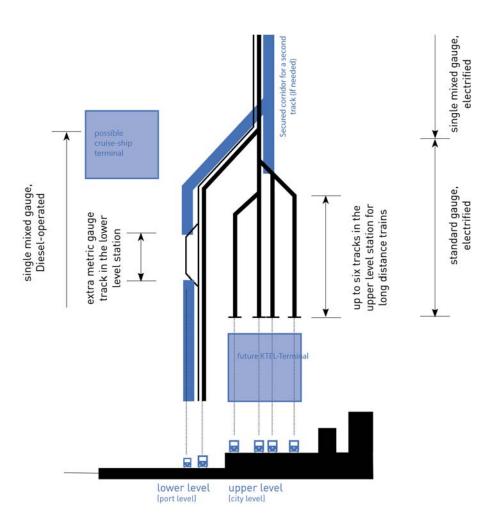


Fig. 4: Future Central Railway Station Agios Dionyssios: the split-level solution / Source: Scholl/Signer/Frezadou 2015: 30

The key recommendations are summarized below (Scholl/Signer/Frezadou 2015):

- > Strengthen the area of transport, railway and mobility development quickly and effectively, along with efficient, step-wise implementation and upwardly compatible measures.
- > Finish the railway section from Kiato to the City of Patras as quickly as possible.
- > Develop Agios Dionyssios as the new main railway station of Patras using a split-level solution and a step-wise process. Trains arriving from the north have a four-track, normal gauge, and long-distance station on the upper level. Tracks going south continue on the lower level with a maximum of two tracks.
- > Keep a 12-m corridor to the new main station and further south, free for arriving and departing trains. The corridor will allow a two-track operation with mixed gauges.
- > Connect the harbor of Patras by a branch line that uses a mixed gauge on southbound routes with the option of a future second track installation.
- > Ensure the continuous operation of the currently available commuter railway line (Prostiakos) between Agios Vassilios and Agios Andreas during the entire construction period of the railway system.
- > Offer the terminals of the current planning and construction phases as a temporary solution with limited capacity until Agios Dyonissios is completed.

The TPP communication planning consisted of continuous communication of the results of the different steps both to the public and the stakeholders, publishing of press releases, informative meetings, repeated invitations to the stakeholders, and publications of the results during the whole TPP. Two more steps completed the TPP in Patras (Scholl/Frezadou/Papamichail et al. 2016):

- 1 In November 2015, a 3-day Exhibition-Presentation (Figs. 5, 6) in public with six planned guided tours in which the eight members of the Steering Committee explicitly introduced the results of the test planning process to 180 citizens of Patras and representatives of the stakeholders. The exhibition focused on creating an opportunity to discuss questions about the project and offered a first incentive to initiate a public discussion.
- 2 In February 2016 a 1-day Workshop of Ideas was organized (Fig. 7) as a pioneer process in Patras and a strong demonstration of a paradigmatic democratic bottom-up initiative. On February 13, 130 citizens together with representatives of the stakeholders divided in six groups had the possibility to discuss, inform and contribute to the further production of new ideas on a common ground of discourse. The workshop focused on the integration of the citizens into the planning process, their information, discussion and contributions to a new culture of public transportation and public dialogue.



Fig. 5: Public presentation of the TPP results (November 2015) / Source: Theodora Papamichail





Fig. 7: Workshop of Ideas (February 2016) / Source: Theodora Papamichail

The advantages of the test planning process compared to other more usual procedures that contribute to the status quo and do not produce real change in spatial planning issues are: 1) the clear separation of political from professional decision-making, 2) implementation of an integral planning approach, 3) establishment of a new planning culture based on discussion and debate through the cooperation of all involved parties, and 4) introducing the bottom-up instruments in addition to the top-down mechanisms.

Finally, the main lesson learnt from the implementation of TPP Patras is that there is an urgent need for the action-oriented education of the Greek planning authorities at all levels, e.g. education based on the principles of integrated spatial and transport planning. In order to achieve this, strong political will at the national level is necessary, along with the initiation of international expert groups working cooperatively on existing long-lasting unsolved planning problems.

## 6 Concluding remarks

In sum, there is a lack of cooperative planning culture in Greece, namely a lack of sustainable, independent planning processes, a lack of long-term planning perspectives, a lack of communication, coordination and cooperation between the responsible actors, a lack of information and integration of citizens into the planning processes.

The result of the non-transparent, fragmented decisions and planning processes and in general the malfunctioning systems described above, is a waste of resources: time, energy and finance (national and European). This has a serious impact on the urban and spatial development of the country: continuous greenfield development (urban sprawl, devastation of valuable landscapes, especially on the coastland for tourist purposes), a lack of urban inward development (unexploited urban potentials, abandoned brownfield areas and building stock in strategic urban areas, significant voids in the urban fabric), a lack of transport and urban hubs, a lack of sufficient functional network connections on the local, regional and European level.

Spatial and infrastructure problems, such as the long-lasting unsolved problem of the railway connection of Patras, are not only of local and regional importance. They need to be faced on local, national and also on European level. The synergies among the local, national and European planning authorities need to be improved.

The existing planning instruments are insufficient to face the long-lasting unsolved complex spatial problems in Greece. There is an urgent need for new informal planning methods suitable for complex planning tasks, like the test planning process. The application of such planning methods needs to be stimulated both with top-down policies at EU level, and with bottom-up local initiatives. In specific cases the required EU standards (e.g. standards for the railway connection of Patras Port) should be reconsidered. This new integral planning approach could liberate existing forces and as a trust-building process contribute to the solution of long lasting complex spatial problems and the creation of a new planning culture in Greece and in Europe.

#### Literature

AIA – Athens International Airport (2018): Passenger trafic development 2017 https://www.aia.gr/userfiles/675393df-ab1a-4b77-826c-f3096a3d7f12/passenger\_traffic-2017\_

December-2017\_final.pdf (January 14, 2018).

Chroianopoulos, I.; Pagonis, T.; Koukoulas, S.; Drymoniti, S. (2010): Planning, competitiveness and sprawl in the Mediterranean city: The case of Athens. In: Cities, 27 (4), 249–259.

Company Profile (2017):

http://www.e-ktel.com/en/company/profile (August 15, 2017).

ERGOSE (2018): Projects in progess.

https://www.ergose.gr/erga/erga-se-exelixi/?lang=en (January 15, 2018).

**Giannakourou, G.** (2011): Europeanization, Actor constellations and Spatial Policy in Greece. In: disP – The Planning Review, 47, 32–41.

Greece - Agricultural Sector (2017):

https://www.export.gov/article?id=Greece-Agricultural-Sector (May 25, 2018).

Nagy, E.; Nagy, G.; Timár, J. (2012): Transnational Comparison of National Policies and Planning Systems. Integrated Urban Development of Vital Historic Towns as Regional Centres in South East Europe. http://www.southeast-europe.net/document.cmt?id=474 (May 15, 2015).

**Pantelas, G.** (2015): Railway development in Athens. Presentation held at International Symposium on Rail and City Development, Athens, April 17, 2015.

PPA - Piraeus Port Authority (2018): Annual Financial Report.

http://www.olp.gr/en/investor-information/annual-reports\_(May 15, 2018).

Scholl, B. (2011): Die Methode der Testplanung. Exemplarische Veranschaulichung für die Auswahl und den Einsatz von Methoden in Klärungsprozessen. In: Grundriss der Raumordnung und Raumentwicklung. Hannover: Akademie für Raumforschung und Landesplanung (ARL), 330–345.

Scholl, B. (2016): Academic Collaboration in Spaces and Project of European Importance. In: Scholl, B.; Moraitis, K.; Pappas, V.; Perić, A.; Frezadou, I. (Eds.): CODE: ATHENS! Railway and City Development in Athens. Zurich: Institute for Spatial and Landscape Development, ETH Zurich, 17–33.

Scholl, B. (2017): Building actor relationships and alliances for complex problem solving in spatial planning: The test planning method. In: disP – The Planning Review, 53 (1), 46–56.

Scholl, B.; Frezadou, I.; Papamichail, T.; Signer, R. (2016): Code Patras, Rail&City: A Test Planning Process for Patras. Exhibition of the Results 2015/Workshop of Ideas 2016. Zurich: Institute for Spatial and Landscape Development, ETH Zurich.

Scholl, B.; Signer, R.; Frezadou, I. (2015): CODE Patras, Rail&City: A Test Planning Process for Patras. Zurich: Institute for Spatial and Landscape Development, ETH Zurich.

 $https://berndscholl.ch/projektwebseiten/codepatras/public_html/download/joint_seminar\_week/CODE%20PATRAS\_Report%20of%20results\_ENG.pdf (June 21, 2019).$ 

Scholl, B.; Vinzens, M.; Staub, B. (Eds.) (2013): Test planning – A method with a future. Solothurn: Canton Solothurn, Office for Spatial Planning; Berne: Swiss Federation, Office for Spatial Development (ARE).

TRAINOSE (2018): TRAINOSE Passenger services.

http://www.trainose.gr/en/passenger-activity/passenger-services/ (May 15, 2018).

WTTC - World Travel & Tourism Council (2018): Travel & Tourism: Economic Impact 2018 Greece. WTTC.

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