

## Delimiting the “Balaton Riviera” tourist destination by using network analysis

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### Abstract

Recently the recognition of the role, potential within, and analysis of networks has been increasing in business and academic areas. Network analysis has also been applied widely in tourism, as numerous researchers are studying connections among elements of tourism, with the main focus on destinations, cooperation and the efficiency of cooperation among players of destination management organisations. The methodology applied in those researches has reinvented social network analysis, which has notable historical roots in mathematics, sociology, and anthropology. As identified in the title, the subject of this study aims to delimit destinations which have been researched in a micro-region (Felsőörs, Lovas, Paloznak, Alsóörs, Csopak) of a Balaton Region, Hungary’s number one tourist destination as well as the local destination management organisation “Balaton Riviera”. Analyzing the data we can conclude that our hypothesis posed at the beginning of the research is verified, namely in the case of this micro region the connections among the actors mark the boundaries of the destination. For the time being, the scope of this research is limited to pilot research only, but thanks to sophisticated methodology and softwares it can be upscaled to manage huge databases as well, and therefore the results achieved herein can be tested elsewhere and generalized.

**Keywords:** tourist destination, social network analysis, destination management organisation, Balaton Region

### Introduction

In the last two decades destination competitiveness has emerged as a major focus of tourism research (BARBOSA, L.G.M. *et al.* 2010; CROES, R. 2011; PAPP, Zs. and RAFFAY, Á. 2011) – mainly when it became evident that spatial competition (that is competition among tourist destinations) was decisive in tourism, due

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to the globalisation and the development of international tourism (KOZAK, M. 2004). Because of destination competitiveness, it has become urgent to find the definition of the destination for effective tourism management. It is essential to be able to outline the territory, which means the place of experience for tourists.

According to JANCSIK and MAYER the role of networks is about to become more and more important. Beside comparative and competitive advantages they argue that *network advantage* can be defined and used as nowadays network competes against network (JANCSIK, A. and MAYER, P. 2010). According to this network advantage those destinations will be more successful in competition, where the actors have more and stronger linkages inside the destination. However, the tourism destination as a place is difficult to outline (as its borders depend on the visiting tourists) and is difficult to define. For one tourist a whole country can be a destination, while for another even a little village can be attractive enough to set off on a journey. Therefore we move back one step in effect and suppose that the territory, which has actors in tourism with many and strong inside linkages – can be defined as tourism destination.

Our research is built on the hypothesis that social networking analysis could provide a tool to resolve the issue so far unclear in the relevant literature, namely how to define and delimitate destinations. We investigate by the help of type and rate of in- and outbound connections whether participation in a *destination management organisation (DMO)* defines a destination indeed or the connections show that linkages outside the organisation are typical and the membership does not delimit a real destination.

## Research background

### *Need for destination management*

Lately tourist demand has changed. The main emphasis is now the *experience*, which can be available in a destination – that means that competition concentrates on destinations (RITCHIE, J.R.B. and CROUCH, G.I. 2000). But a tourist destination is often not cleared. In more countries there are minimal criteria such as number of guest nights, local or community tourist bureaus or the size of the budget (AUBERT, A. *et al.* 2010). But the main characteristic is that the whole territory means one unit for the tourist, and at the end of the travel all the things build up into one complex experience. Therefore it is important to look at destinations as the scenes of available experiences – where the product (that is the destination) is lived through instead of being consumed by tourists (STAMBOULIS, Y. 2008).

Tourists' experiences can be of all kind however – and also the scope of the destination is observed differently. That is the main difficulty of destination research: the 'district' cannot be easily defined. Following NEMES NAGY who says: "as many people – so many scopes" (NEMES NAGY, J. 2009, p. 101) it can also be said: as many people – so many destinations.

Among terms used in economics, a tourist destination can be seen as the equivalent of a traditional nodal region. This type of region is usually regarded as related areas of several neighbouring settlements – with one or some bigger city in the middle, as a node (LENGYEL, I. 2009). Nodal regions mean the spatial concentration of an economic activity, mainly of processing industry (LENGYEL, I. 2010). Nevertheless a destination is usually organized around an *attraction* not a town or village – it is similar to a nodal region. In addition a destination is also open and cannot easily be defined by administrative boundaries.

Yet, in the scientific literature many of the authors examine regions (CRACOLICI, M.F. and NIJKAMP, P. 2008) or mostly countries (GOMEZELJ, D.O. and MIHALIC, T. 2008; DWYER, L., KIM, C. 2003) as destinations because it is easy to handle and research – just because of the existing boundaries. They usually also emphasise that considering geographical and/or administrative boundaries as definers of a destination is not always eligible, because tourists' choices do not rely on administrative boundaries. KLEPERS and ROZITE say the same drawing on their research; they found that travellers do not notice administrative borders in general (KLEPERS, A. and ROZITE, M. 2010).

LEIPER says that a destination is the place towards which people travel and where they choose to stay for a while in order to have experiences (LEIPER, N. 1995). This definition makes research difficult, because the territory and the boundaries of the place regarded as their 'destination' can vary according to the tourists' expectations and motivations.

Taking the supply-side approach, BUHALIS defined a destination as a region where all the supply elements (attractions, services, etc.), which a tourist would need are available (BUHALIS, D. 2000). It seems easy to delimitate the destination like this, but considering the various services that various tourists need – it also fails to give a good basis.

We propose to consider the issue from a management view. We presume, that destinations may be considered as collaborating networks of complementary organizations (GUNN, C.A. 1997) and it is also evident that a destination with a management organisation is more effective and competitive and able to react more rapidly on market changes than without it (RAFFAY, Á. *et al.* 2010). Nowadays more and more DMOs are founded in Hungary as well, however we couldn't find such an organisation in every Hungarian destination, so we aren't able to compare the destinations just based on this definition.

Many studies (DE ARAUJO, L.M. and BRAMWELL, B. 2002; PAVLOVICH, K. 2003; DREDGE, D. 2006a, b; PLUMMER, R. *et al.* 2006; WANG, Y. and FESENMAIER, D.R. 2007) have indicated the importance of inter-organizational networks in destinations and the importance of collaboration among organizations. Because of the latter statement and the development of the DMOs' network in Hungary our research is based on the management approach as we try to describe the boundaries of a destination with the help of the bottom-up relationships between the actors and the connecting DMO.

### *Development of DMOs in Hungary*

In destination development Hungary has a notable basis: with a strong national marketing organisation which operates with the help of wide network of Tourinform offices throughout the country; and the regional organisations were established several years ago. Because of the successful structural development it is important to take into account both opportunities (effective tourist strategy of the government; activity of NGOs) and threats (instability in the government; destination managers not recognizing their role) as well (JANCSIK, A. *et al.* 2008).

Nowadays destination management is of growing importance and a key element of Hungarian tourism policy, since it became one of the five main priorities in the National Tourism Development Strategy for the period of 2005–2013 (worked out by Ministry of National Economy in 2011). Tourist destinations in Hungary have not been bottom-up units thinking together, but small regions formulated by the central government (HANUSZ, Á. 2010). No other administrative region can, however, respond as quickly to market changes as a destination based on close cooperation (KOVÁCS, M. 2008). Regional tourism supply and the formulation and strengthening of tourism destinations are some of the most significant instruments to increase competitiveness (HANUSZ, Á. 2010).

This is the main reason why destination management is so important (not only in Hungary). Destination competitiveness is a fashionable term, but also a key factor influencing the long-term survival of a destination. It follows that the Secretariat for Tourism within the Ministry of Local Authorities decided to foster the formation of DMOs throughout the country (RAFFAY, Á. *et al.* 2010) – to maximize its advantages like:

- possibility of conscious development with the interest of all the stakeholders;
- financial basis and competence for independent actions;
- effective marketing;
- effective image-formation for the area;

- increasing tourism performance, more tourists and income;
- delegating tourism-like tasks by local governments to the DMO (yet have more tax-income);
- new work places, migration can stop (HANUSZ, Á. 2010).

The first organisations which worked like a DMO were established at the beginning of the previous decade. For instance, the success of the Gyenesdiás Tourism Association, founded in 2003, proved that building from below is effective indeed, and only cooperation leads to development.

According to this model of tourist administration, the government tried further bottom-up initiatives and helped the local and regional participants of tourism to organize DMOs for improving destination management performance. In 2005–2006 within the frame of Lake Balaton Partnership Programme training was organised and tourism professionals were teaching about the importance of cooperation in the tourism sector. They presented international best practices and sketched out the planned Hungarian system. As a result of this training the Balaton DMO Booklets came into existence (CLARKE, A. and RAFFAY, Á. 2011). For example, in 2008 a handbook of organizational and professional DMO development was published. This offers easy-to-follow guidelines for the tourism sector to build up these organisations and in addition more and more invitations to tender became available to achieve these aims (JANCSIK, A. *et al.* 2008).

The handbook also stated the main characteristics of the Hungarian DMO-system, like its structure. DMO-system in Hungary consists of three levels:

1. local level (settlement),
2. middle level (micro-region),
3. regional level (region).

*Local level* – as the basis of the whole DMO-network – is usually formulated by a settlement, if the conditions for effective operation are insured. If conditions are not given in one settlement – that has the possibility to cooperate other settlements, yet formulating a local level DMO system or the local enterprises can join in the geographically nearest local (maybe micro-regional) organisation (NYIRÁDI, Á. and SEMSEI, S. 2007). Destination management organisations can exist at all the levels – but with slightly different functions. Tasks are shown in *Table 1*.

Some expectations are common (at all levels), like development cooperations, research activity or information management (LENGYEL, M. 2007), which are stated in the handbook – and appear as basic requirements in the series of tenders.

Since 2010 the new DMOs have to be registered at the Secretariat for Tourism within the Ministry of National Economy (it's a prerequisite of a tendering activity). At the time of the research 75 registered DMOs were working in Hungary (<http://www.tdmszovetseg.eu/>).

Table 1. DMO tasks at different levels

List of tasks	Local	Middle	Regional
	level tasks		
Planning	occasional	main	main
Development	main	main	occasional
Destination marketing	occasional	main	main
Attraction and visitor management	main	main	occasional
Quality management	occasional	occasional	main
Monitoring	occasional	occasional	main
Professional training	occasional	occasional	main
Advocacy	occasional	occasional	main

Source: LENGYEL, M. 2007.

In 2011 a new tendering period began and with the help of this invitation to tender the government wanted to support the formation of not only the local but the regional DMOs as well. At the end of last year the first regional DMO of Hungary, the Balaton Regional DMO, was established.

### *The SNA methodology*

In the last decade social network analysis – used also in our research – became the scientific focus of economists. The reason why it turned out to be important is the appreciation of the role of connections among the actors in economic life and competition. It follows that it comes to the front of scientific interest of economists in last decades. The significance lies in that SNA collects a new type of data (relational data), it asks new type of research questions (structural analysis of whole or ego networks) and it uses new types of methods for analysis (matrix and graph theory) (LETENYEI, L. 2005). Although the SNA represents a new approach applied just for some decades in economical researches, the method goes back a long way thanks to the mathematical (e.g. EULER – Bridges of Königsberg, 1736), sociological and anthropological roots (SIMMEL, RADCLIFFE-BROWN, MORENO, MILGRAM, etc. – cit. GERŐ, M. 2006).

The SNA enables explorations of the formal and/or informal connections, furthermore linkages with different content (information, knowledge, commercial, etc.) of a community (e.g. actors of a destination). With the help of extensive indicator systems (e.g. density, centrality, mean distance, etc.) it is possible to characterize the role of the actors involved to the network or the stability of the whole network. Furthermore the network maps produced by various softwares underpin the graphic presentation of a network structure. In many cases these maps give enough information for example for the determination of central actors or the identification of isolated elements. Besides, there

are various indices introduced and available to map networks structure more deeply and thoroughly and, for example, to examine network position, success, and correlation of economic output (BENCZE, Sz. 2010). According to the literature, the most important indices to characterize topology and behaviors of a complex network are as follows: density, degree/degree centrality, average path length, clustering coefficient, efficiency (BAGGIO, R. 2008, 2009, 2010; BAGGIO, R. and COOPER, C. 2008; BAGGIO, R., SCOTT, N. and COOPER, C. 2008).

These possibilities mean it is an excellent starting point for network development (e.g. regional development), namely if we know the social network of the given destination, a conscious network development can begin and specific arrangements can be determined for involvement of isolated actors or more efficient information flow (LETENYEI, L. 2005; BENCZE, Sz. 2010).

Our investigation is just a pilot research with a small number of participants, but sophisticated computerised analysis techniques could elevate this study to higher levels (regional or national) of much higher volume, which would open space for testing, comparison, and generalisation. BENCZE studied a large area, as she studied connections (5404 connections) among Small Region Coordinators and their partners in the Central Hungarian region by analysing the database of Small Region Coordination Network with the help of social network analysis (BENCZE, Sz. 2010). At the international level larger areas, regions (and therefore more elements) have already been studied with relevance to tourism: BAGGIO studied dynamics and efficiency of connections among touristic destination players within the Elba region of Italy (BAGGIO, R. 2008).

### *SNA in tourism*

The SNA appears in Hungarian tourism literature only tangentially. It means that certainly the Hungarian researchers have been interested in destination networks and cooperation and network of different tourism enterprises (JANCSIK, A. and MAYER, P. 2010; JANCSIK, A. 2010; RÁTZ, T. and KÁTAY, Á. 2009), have until now – except for this project - have not carried out specific SNA research in the field of tourism. Therefore we can review just the international tourism related SNA literature and examples.

In the course of his literature review BAGGIO collects articles concerning social networks based on three respectable journals (Tourism Management, Annals of Tourism Research, Current Issues in Tourism). These were selected from the period 2000 to 2006 which concerned three main areas: inter-organisational networks (majority of studies), policy networks and individual social networks (BAGGIO, R. 2010).

Table 2 shows our own article collection made during the period 2005 to 2012 based on the most significant tourism related journals and confer-

Table 2. SNA methodology in tourism related literature

Authors	Year	Keywords
HWANG, GRETZEL and FESENMAIER	2006	multi-destination travel, city tourism, destination bundling; network analysis, international tourism
BAGGIO, SCOTT and ARCODIA	2008	co-authorship, events literature
HU and RACHERLA	2008	co-authorship, hospitality research, knowledge domain, knowledge networks, social network analysis
McKERCHER	2008	citation count, impact analysis
BENCKENDORF	2009	bibliometrics, social network analysis, Australia, New Zealand, research, trends
BENCKENDORF	2010	collaboration, co-authorship, bibliometrics, social network analysis, Australia, New Zealand
RACHELA and HU	2010	co-authorship, knowledge networks, scientific collaborations, social network analysis, tourism research
YE, LI and LAW	2011	co-authorship, social network analysis, tourism and hospitality journals, research collaboration
YING, XIAO	2011	knowledge network, scientific community, social network analysis
YE, SONG and LI	2012	co-authorship, cross-institutional collaboration, tourism, hospitality, weighted social networks
SCHAFFER, LAWLEY	2012	knowledge transfer, artificial reefs, network analysis, social value, tourism
BAGGIO, SCOTT, WANG	2007	destination, collaboration, network analysis, websites, Fiji, Elba
BAGGIO, CORIGLIANO, TALLINUCCI	2007	tourism destination, internet, web, cooperation, economic and social integration, complex networks
BAGGIO, MARZANO	2007	tourism destination, power, content analysis, network analysis, marketing plan, Queensland
BAGGIO	2008	complex networks, tourism systems, web, internet
BAGGIO, COOPER	2008	innovation, knowledge transfer, network analysis, tourism destinations
BAGGIO, SCOTT, COOPER	2008	complex systems, network science, tourism destination, destination management
SCOTT, COOPER, BAGGIO	2008	network analysis, destination structure, cohesion
BAGGIO	2009	network science, complex systems, tourism destination, destination management, qualitative and quantitative methods
BAGGIO, CORIGLIANO	2009	web navigation, hyperlinks, complex networks, random walks
COOPER, SCOTT, BAGGIO	2009	networks, stakeholder, tourism destination, destination management
BAGGIO, COOPER	2010	epidemic diffusion models, knowledge transfer, network analysis, tourism destinations
BAGGIO	2010	tourism destinations, collaboration, network analysis, modularity
ROMEIRO, COSTA	2010	rural tourism, co-management, cooperation, innovation, social network analysis, Spain
LEE, Choi, Yoo and OH	2012	integrated tourism management, centrality, network analysis, spatial interaction, Korea
PHORR	2005	tourism policy process, tourism development master plan, policy cycle and network approach, systems model, Australia
DREDGE	2005	regional tourism system, networks, innovation
DREDGE	2006a	collaborative planning, tourism, networks, conflict, policy communities, community, local government
DREDGE	2006b	public-private partnerships, local tourism association; local government, tourism, networks
PHORR	2006	policy making, network approach, Northern Territory, Australia

Source: Own compilation on the basis of references



ences. Two research fields are dominant in the literature: co-authorship among tourism researchers and destination management appears in most cases as a background in SNA analysis

## General introduction of the study area

### *The importance of Balaton Region*

Traditionally lakes are a vital part of recreation and tourism in many parts of the world (HALL, C.M. and HÄRKÖNEN, T. 2006) – and ‘lake tourism’ is an important sector of Hungarian tourism as well. As one of the largest lakes of the Central European region, Balaton, the “Hungarian Sea” (as the lake is often called by Hungarians) can be mentioned together with Lake Geneva in Switzerland or Lake Constance (Bodensee) in Germany. As *Table 3* shows, Balaton differs from the others mostly in its average depth – the lake is shallow enough to follow the temperature of the air quickly (the temperature of the water is usually over 20 degrees in the summer).

It confirms that Balaton destination (the lake and its surroundings) is the most popular holiday resort of Hungary, both for domestic and international tourists: lakeside holidays, historical monuments, special natural values and very good opportunities for trips are available for visitors. Although the Balaton area has been an agricultural area with average conditions, from the end of the 19<sup>th</sup> century it is clear that the development of the lake and its area can only be based on tourism, and tourist services (BUDAY-SÁNTHA, A. 2008) (*Table 3*).

Today tourism is the most important economic sector by the lake. On the southern part of the lake there is a wide band of shallow water, which is exceedingly suitable for families with little children to have a lakeside holiday. On the other, northern part the water deepens closer to the bank, but there are plenty of safe beaches here as well.

*Table 3. Main data of Lake Balaton – compared to similar European lakes*

Indicator	Lake Geneva	Lake Constance (Bodensee)	Lake Balaton
Water surface, km <sup>2</sup>	580	536	594
Length, km	72	63	77
Average depth, m	153	90	3,6
Climate	mediteranean	continental with oceanic effects	temperate continental
High season	summer and winter	summer and winter	summer

Source: HORVÁTH, Z. 2011.

Beside classical holidays (with swimming and sun bathing) active holidays are also more and more popular. Water sports like sailing date back to long time ago, while bicycle tourism is rather popular now that the bicycle route is ready around the lake. In the Balaton region 6 official wine regions can be found, that is why the region is famous for its wine, wine tourism and wine festivals.

Balaton destination is classified as one of the 9 tourism development regions (Balaton Region) in Hungary (Figure 1). *Balaton Region* and the *Balaton Resort Area of High Priority* have almost the same territory – and they are usually regarded as synonyms. As mentioned it is the most popular holiday destination of the country – yet it is the second best destination (after the capital and its surroundings) regarding the number of visitors and guest nights. Figure 1 shows the quantity of guest nights per regions.

The management of Balaton Region is undertaken by relevant organisations. One is the Balaton Development Council, which is responsible for appointing development directions and for supporting development projects. Marketing management is the responsibility of the Balaton Regional Marketing Directory.

At the end of 2011 the Balaton Regional DMO was formed – as the association of local DMOs in the region. This organisation is the only one which can join the forces of the stakeholders. The objectives of this DMO serve the development of the region by market research, effective marketing activities and professional support.

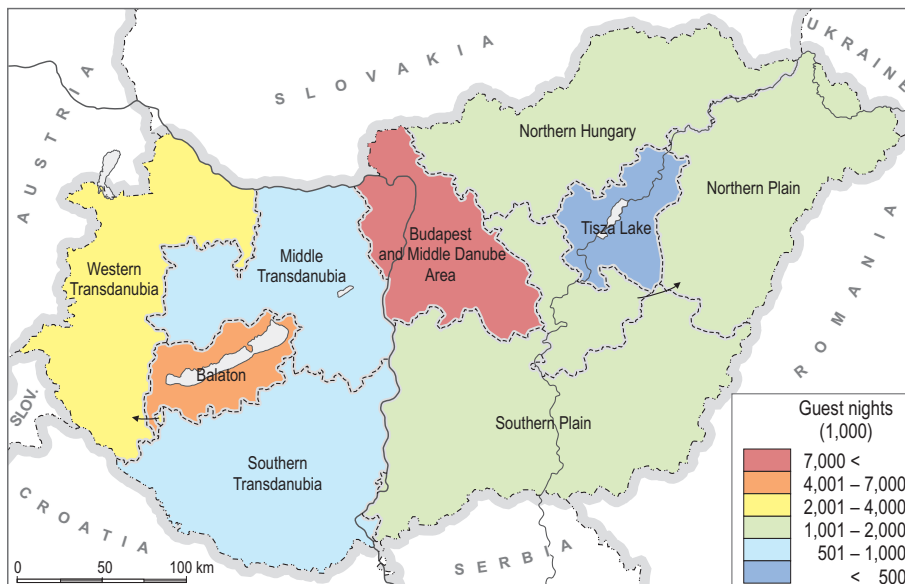


Fig. 1. Guest nights in different tourist regions of Hungary, 2011.

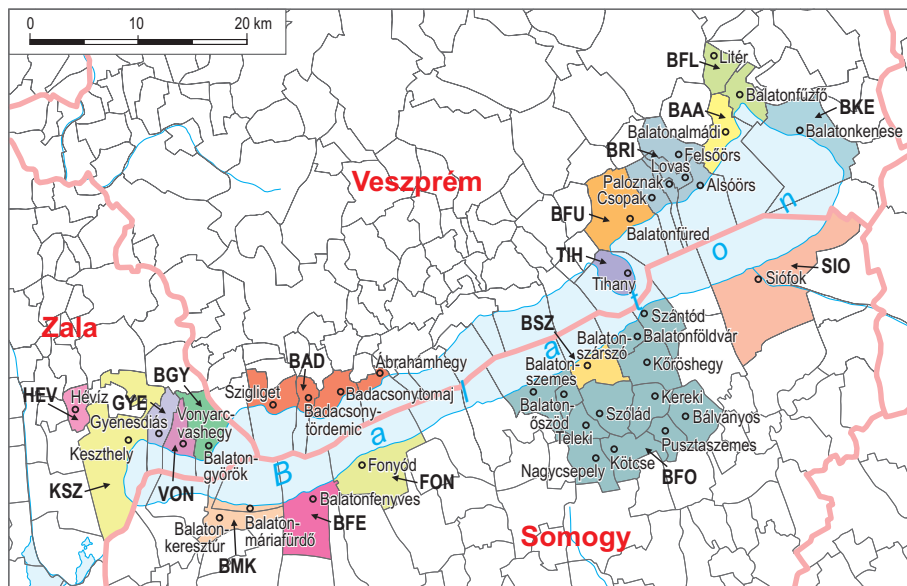


Fig. 2. Local destination management organisations (DMOs) in Balaton Region (with member settlements). – BAA = Balatonalmádi DMO; BAD = Badacsony DMO; BFE = Balatonfenyves DMO; BFL = Balatonfűzfő-Litér DMO; BFO = Balatonföldvár DMO; BFU = Balatonfűred DMO; BGY = Balatongyörök DMO; BKE = East Gate of Balaton DMO; BMK = Balatonmáriafürdő-Balatonkeresztúr DMO; BRI = Balaton Riviera DMO; BSZ = Balatonszárszó DMO; FON = Fonyód DMO; GYE = Gyenesdiás DMO; HEV = Hévíz DMO; KSZ = Keszthely DMO; SIO = Siófok DMO; TIH = Legend of Tihany DMO; VON = Vonyarcvashegy DMO

Regarding the number of local DMOs this region “is the best”: almost 30 per cent of all the Hungarian local DMOs can be found in Balaton Region. Figure 2 shows the DMOs in the region – it can be seen in the map that there are DMOs working for only one settlement, and others covering 2 or more settlements.

Beside the significance of the region in tourism, the choice of it as a research field is also reasonable because (a) this region has a special tourism milieu (RÁTZ, T. and MICHALKÓ, G. 2007); and (b) Lake Balaton destination is an internationally known tourist destination (JORDAN, P. 2006), and is a region, which consists of smaller destinations.

### *The Balaton Riviera DMO as tourist destination*

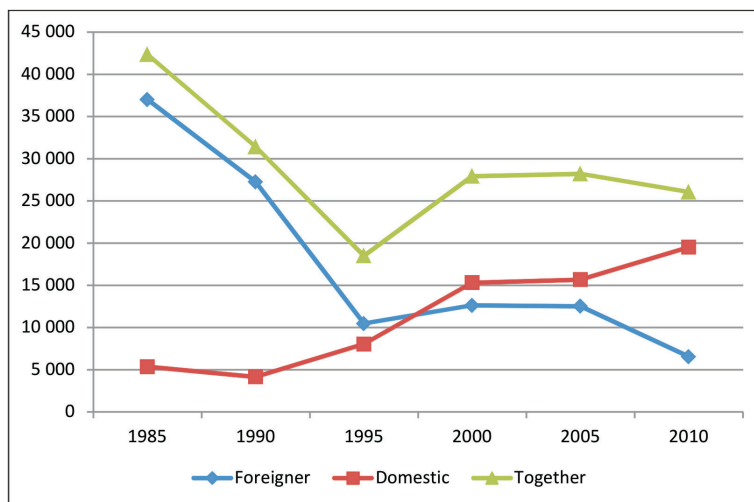
The ‘Balaton Riviera’ as a tourist destination is situated on the Northeastern part of the lake, between the towns Balatonfűred and Balatonalmádi (BRI as

seen in *Figure 2*). It consists of 5 villages; 3 at the lakeside and 2 off the shore in the hinterland. It means relative closeness; these 2 villages are only 3-4 kilometres away from the lakeside villages. That is important to note, because the tourism pattern changes even some more kilometres further from the lake (PÉNZES, E. 2002).

Regarding its tourism infrastructure and supply the Balaton Riviera can be defined as a homogenous, average subregion of the Balaton Region: beside the traditional lakeside holiday the tourism potential consists of horse-riding and sailing facilities, and there is a good basis for wine tourism and bicycle tourism.

Recently a significant alteration has occurred in the tourism demand. As it can be seen in *Figure 3* foreign (mainly of German origin) guests were previously predominant – with an infinitesimal proportion of domestic tourists. By the end of the year 2000 this position turned and since then the number of foreign guests has been continuously decreasing – while the number of domestic tourists has been increasing.

The main target group of the micro region (as well as of the whole Balaton region) used to consist mainly of East- and West-German tourists, who used to travel to the lake so as to meet each other. The Balaton offered not only cheap recreation, but also served as a meeting point. After the transition in 1989–1990 this function broke off and it led to a rapid decline first and a slower one afterwards (BUDAY-SÁNTHA, A. 2008). It became evident that the Balaton destination has to compete in an international market – and inevitable that the tourism supply of the region should be drastically renewed.



*Fig. 3.* The number of foreign and domestic visitors at the Balaton Riviera between 1985 and 2010.

As European consumers want complex experiences and want to look at a destination thoroughly, and from the most possible aspects – complex products are needed. The willingness to cooperate is the most mentioned objection of the development (BUDAY-SÁNTHA, A. 2008). The Balaton Riviéra destination was among the first destinations to formulate a DMO so as to achieve effective cooperation of the suppliers of the tourism market – and also to attract more tourists (Figure 3).

The Balaton Riviera Tourism Association was founded in October 2005, initiated by the mayors of the five villages. In those days, few similar organizations existed in the Balaton region, but the participants involved in tourism had the opportunity to meet a number of best practices even back then. These were mainly Austrian and Italian examples, which were seen due to their geographical closeness. It was easy to pay visits and gather personal experiences. There were also exemplary initiatives in Hungary, even in the Balaton area. For instance, the Gyenesdiás Tourism Association, which was an important stimulus in this process – mainly because foreign examples are often difficult to adapt to Hungarian circumstances (CLARKE, A. and RAFFAY, Á. 2011).

Balaton Riviéra DMO has been fairly successful – even if it realised only 3.5 per cent of guest nights of the Balaton Region in 2010. With this result, however, Balaton Riviera was among the top 10 DMOs (exactly the 7<sup>th</sup> best), in the wake of such successful DMOs like Hévíz, Siófok, Balatonfüred, Keszthely etc. – as seen in Table 4.

Hévíz is the absolute leader in the region. The objective of the research, however was not to test the most successful DMO destination – but a self-organised small destination preferably with more than one settlement.

In this DMO five settlements (mainly villages) together represent the special features of settlements in the Balaton region – regarding for example their location: three of the villages are lakeside settlements (Alsóörs, Csopak

Table 4. 'Top' DMOs of Balaton Region in figures, 2010

DMO	Number of guest nights	Average number of employed in tourism	Income from tourism in 1,000 HUF	Number of DMO members
BAA	62,228	145	470,225	60
HEV	934,385	1,422	8,363,661	94
SIO	58,104	624	4,236,477	295
BFU	458,797	464	3,312,007	170
BFO	241,889	361	1,059,772	130
KSZ	163,137	133	601,443	no data
BRI	102,766	42	293,374	130
TIH	101,028	148	803,644	20
FON	97,380	39	224,591	51

Source: Own compilation.

and Paloznak), while two of them have no lakeside and are situated some kilometres away from the lake (Felsőörs and Lovas).

In the case of these five villages, action was initiated by the local governments, as it was clear that inhabitants and local enterprises were not yet ready to act on their own behalf. However it was urgent to start the process of cooperation immediately, prompted by the reactions needed to changes in demand and the time factor.

The association, founded in 2005 with 40 members, now has 130 members, as *Table 4* shows. This indicates that regional participants have accepted the necessity of a complex supply and a unified image, which are built up by their own cooperation. This is the way they can offer complex experiences to tourists visiting the area.

## Research design

### *Hypotheses*

Investigating the DMOs two hypotheses can be outlined.

*H1: Tourist destinations can be delimited by the methodology of SNA.*

The starting point of our research was the question: if the methodology of SNA can delimit a destination by mapping connections among service providers. Assuming that tourism service providers would cooperate with those in the same destination (serving mainly the same guests), our main hypothesis was that the methodology is an appropriate tool to draw the borders of a tourist destination.

*H2: Only one settlement is not enough in all cases to form a local level DMO.*

We also wondered if a destination next to the Balaton should consist of one settlement only – or whether a few settlements can cooperate and formulate a ‘real’ destination. Regulations and recommendations could not help, as the DMO handbook said: a local DMO is established by the settlement itself, although if it is necessary and possible, the settlement can cooperate with others and set up even a local DMO together as well. We had the question: if Balaton Riviera, which consists of 5 settlements is a real destination – whether it was 2–3, even 5 destinations together, maybe together with other nearby settlements.

### *Sampling*

In our research we used quantitative methods because of the type of information needed to undertake the analysis; we needed answers from the actors of what we supposed to be the destination of the Balaton Riviera about the

number and nature of the links they have established and to identify from those actions the resultant structural characteristics. We planned to investigate the whole network, in this small region of the 5 settlements. Due to the lack of time we could not ask every member of the DMO, so we asked the destination manager to identify the key stakeholders of the micro region. Some of the 35 proposed respondents were not available (our research was carried out after the high season, but during the grape harvest period), so at the end we could ask 24 members from the 35, which is also a fair sample. We applied researcher-administrated structured questionnaires (the respondents had to make a list about partners whose services they recommend), and at the end of the questionnaire we had some open ended questions about the membership and relationships in the DMO.

The enterprises of the villages with direct lakeside access represent a somewhat higher proportion amongst the respondents (Csopak and Alsóörs – 14 respondents, Felsőörs, Lovas, Paloznak – 10 respondents). It must be noted that there are more service providers in the villages with direct lakeside access. (Although Paloznak has a direct lakeside, but tourism services are limited to one campsite and an open access beach. It means that the service supply is less significant than in Csopak or Alsóörs, where paying beaches are working.

The type of business of the enterprises can be described as follows: 11 actors deal with accommodations, 6 of the respondents work in hospitality and catering and 6 enterprises operate in the winery sector. 3 offices – 2 of them are accommodation providers as well - deal with inspected and recommended accommodation services for tourists visiting the micro region, two of them have important and stable foreign partnerships. Suppliers offering additional services can also be found in our sample (5 enterprises); for example a folk-dance group, an association for preserving local traditions, event-organisers and sailboat-rental also occur among the respondents. Some of the enterprises run more businesses which is the reason why the sum of the suppliers does not match the sample size.

Three enterprises started their business before 1990, 10 actors began their activity between 1990 and 2000 and 9 respondents launched out on their enterprises. In 2 cases we do not have these answers from the questionnaire.

The accommodation suppliers carry out their business as private accommodation providers or individual enterprises, catering service providers and wineries are mainly limited companies and in some cases limited partnership companies. Furthermore we are talking about family enterprises in every case.

We asked the actors about their income resulting from their business activity. To reach the highest response willingness they had to estimate the sum with the help of an income-scale, but we could not collect all the answers using this method either (6 respondents did not given us answer). *Table 5* shows the categories and the sample pattern as well.

Table 5. Enterprises in the sample by income categories

Categories of incomes in million HUF	Number of enterprises in the sample
under 0.5	1
0.5–1.0	3
1.0–2.0	3
2.0–5.0	4
5.0–10.0	3
above 10.0*	4

\*The standard deviation of incomes varies between 12 and 80.

Considering the demographic data we can characterise the respondents as follows:

- in 15 cases we asked men as the leader of the enterprise and in 9 occasions women were interviewed;
- the average age of the respondents is near to 53;
- regarding the qualification the rate of respondents having secondary certificate is slightly higher (10 higher education certificate, 13 secondary certificate, 1 skilled worker).

## Results

At the beginning of the interviews we asked the respondents to make a list of the partners whose services they recommend. The respondents and their answers were encoded with a combination of a letter and a number:

- accommodation – SZ (because in Hungarian we call them “SZálláshely”);
- offices offering inspected and recommended accommodation services for tourists visiting the micro region, a type of travel agency – UK (because in Hungarian travel agency means “UtazásKözvetítő”);
- hospitality and catering suppliers – V (because in Hungarian we call them “Vendéglátóhely”);
- other service providers – E (because in Hungarian we call them “Egyéb szolgáltató”).

In the figures different colours designate the five villages (Felsőörs – yellow, Alsóörs – orange, Csopak – green, Lovas – red, Paloznak- pink, out of micro region – grey). The circle sign is for actors who are members of the DMO and are situated in the region as well. The square means that the actor works in the micro region but is not a member of the DMO.

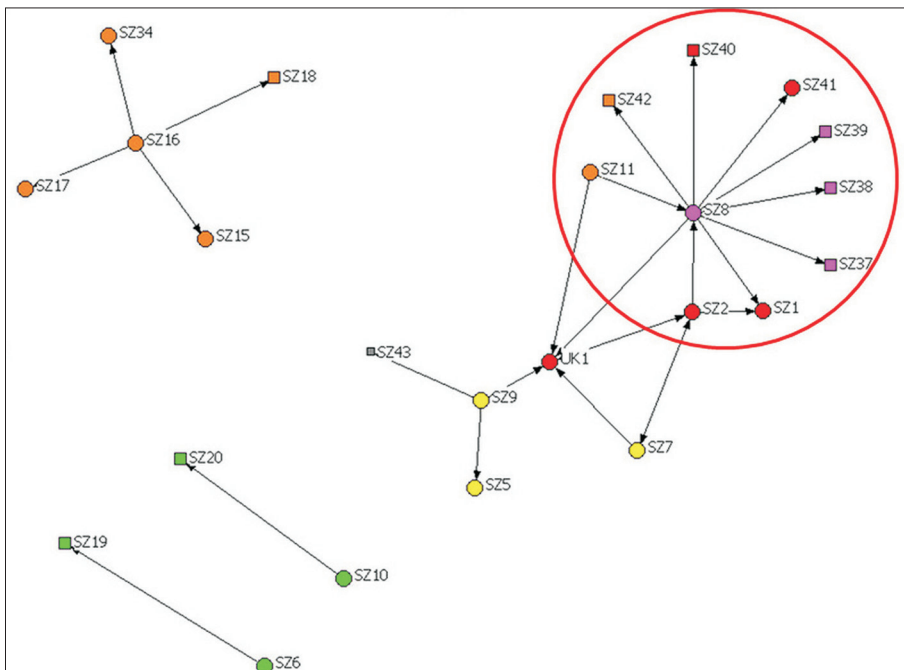
In Figure 4 the relationships among the accommodation suppliers can be seen. The five villages are signed by five different colours, and the sign SZ19 and SZ20 are summarized categories. These are neighbourhoods



of the other nodes. It is easy to read that just few relationships exist (the density is low), usually we can see micro ego networks (an example is circled within *Figure 4*).

It is not an unexpected result, because probably the visitors would like to stay nearby and because of the development of the local economy service providers recommend destination-members. In this case the DMO-membership is not a primary reason, closeness is more important. (The relationships illustrated in this figure have been existing for a long time, the evolution of them was separate from the founding of the DMO.)

*Figure 5* shows the relationships among accommodation and hospital-ity suppliers. Here we can see more connections pointing outside the micro region, where these are concentrated at 3 nodes: 2 wineries and 1 accom-odation supplier. The wineries offer other wineries often and accom-odation providers outside the micro region send guests to high quality wineries regularly. The external relationships of this accommodation arise from family ties. In the diagram below you can see a remarkable growth regarding the number of connections among the villages. The closeness is less important, they offer restaurants of other villages more frequently.



*Fig. 4.* Partnerships among accommodation providers (Explanation of codes is in the text)



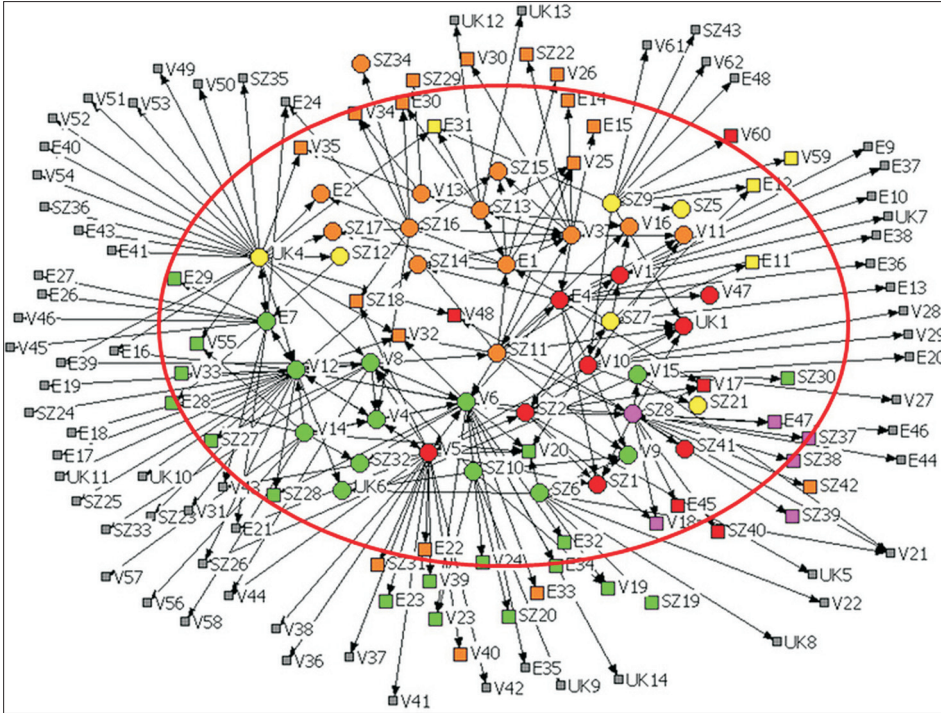


Fig. 6. The complete network of providers (Explanation of codes is in the text)

## Conclusions

Dealing with destination competitiveness it is indispensable to outline clearly what a destination is. According to the relevant literature the delimitation of tourist destinations can be done in many ways – from insisting on applying geographical/administrative boundaries to the abstract theories of tourists' choices. However, much more realistic approaches are needed in practice, when trying to develop and/or manage a tourist destination.

We presumed that a spatial unit with existing networks among tourism suppliers can be effective enough to offer complex tourism products and experiences – which can be clever enough to retain tourists at the location, namely at the destination.

Looking at the operating DMOs in Hungary we chose the DMO of Balaton Riviera and the SNA methodology to test our hypothesis: Tourist destination can be delimited by the methodology of SNA (H1).

Asking the players of the DMO we mapped the connections and the network. Analysing the data we can conclude that the hypothesis can be accepted: the linkages determine the boundary of the destination rather obviously – at least in the case of this micro region.

We also hypothesised that only one settlement may not be enough in all cases to form a local level DMO (*H2*). We can accept this hypothesis as well, because the figures above show that beside the inner connections of the settlements the actors possess a number of outside linkages oriented to actors of other villages in Balaton Riviera destination. Along the hypothesis the results of the research let phrase the further conclusions and suggestions:

1. Recommendations for Balaton Riviera DMO.

It turned out that this methodology is suitable to find existing connections, formal and informal partnerships, which makes it possible to find those players, who have many connections – but are not members of the DMO or it shows the isolated actors as well.

2. *Useful suggestions for all DMOs in Hungary.*

We found out that a local DMO destination can consist of many settlements. DMOs should not be afraid of cooperation among settlements; they should be brave enough to involve the surroundings – especially where the SNA method shows living and strong connections. Based on the SNA methodology the DMOs can improve their management tools and compete on a higher level in a constantly changing economic environment. In case of systematic SNA research the DMOs will be able to show the dynamic of the linkages, so it can be a useful tool to represent their activity to foster the cooperation among the members of destination.

3. Lessons learned about the methodology.

We have to remark that the SNA method is expensive and long to implement. Yet it is worth to learn more about the DMO's connection because of the above mentioned benefits. In our research we asked the members about the partners whom they recommend to the tourists. But SNA enables to explore linkages with different content (formal/informal, information- and knowledge-flow, etc.) of a community (e.g. actors of a destination), so this method can give us a complex picture (in literally and a figurative sense as well) about the destination.

Our research is considered as a pilot research, but it confirmed that this method can be suitable to determine the boundaries of the destination and further research is needed to declare this as a statement.

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