

## **Annex 15. BASTIS, the Baltic Sea Heritage Tourism Service**

**([www.bastis-tourism.info](http://www.bastis-tourism.info))**

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BASTIS, the Baltic Sea Heritage Tourism Information Service ([www.bastis-tourism.info](http://www.bastis-tourism.info)) has been developed to provide tourism professionals in the Baltic Sea Region (BSR) with the market information they need. The focus of BASTIS is heritage tourism but is not limited to this topic. Its general contents are valuable for basically all areas of tourism. Its approach is based on the assumption that a lot of the needed information is publicly available, yet scattered in many sources, unstructured and not harmonised; other relevant information is existing, but exclusive to certain institutions and persons. The aim of BASTIS is to access and harmonise publicly available information and locate and make accessible restricted information in order to provide relevant market information free of charge and easily accessible for SMEs, tourism authorities and tourism associations working in heritage tourism in the BSR. Its content is now focussing on the national level, but the technology and structure could very easily be adapted for the regional level.

To address its strategic objective, its programmes and activities as described by INRouTe, a Regional Tourism Inter-Institutional Network is required to design the corresponding technological medium integrated in an online platform, which should count with diverse services and applications, among which are the following: (a) the front office of the platform would be a web page constructed with a collaborative ambition, (b) as part of the back office of the platform, it would be relevant to count with a user management module where key stakeholders are included as a separate set of users, (c) given that the Regional Tourism Inter-Institutional Network needs to keep escalating its work, upgrading continuously, this requires collaborative modules, (d) a forum module, where users, mainly stakeholders, can participate with their opinions on specific topics, (e) the core of the back office will be formed by the data warehouse and its different datamarts, (f) a module that allows for online training (webinars and other similar functions), (g) a visualization module, facilitating the comprehension of the statistical information provided.

The BASTIS approach already encompasses all these aspects. Its technical approach is at the same time very cost-effective and user-friendly. Its philosophy particularly focuses on a collaborative multi-editor approach and the contextualisation of data from different sources. Speaking in technical terms, the core of BASTIS is a 'wiki'. This makes BASTIS in comparison to other existing tourism observatories very special and at the same time very simple. By using free and widely used software instead of an individual solution, this means that software and IT infrastructure is very inexpensive and the technological skill of the administrators and editors does not require any special knowledge. It also means that the system is very easy to transfer to other regions and to adapt to their needs. There are no licensing costs or copyright issues to be taken into account.

In the case of BASTIS, the decision to use the wiki idea had three main reasons: First, wikis allow to providing freely formatted reports and profiles, combining numerical data, explanations, comments, links to other resources, footnotes, images, video and sounds. Thus, a wiki is much more flexible than an information system that collects data in fully structured way. Second, a wiki is designed to collect data in a collaborative way. Wikipedia as the most prominent application of the wiki idea shows that this collaborative approach works. BASTIS is dependent on multiple users and institutions to provide data and feed them into the information system. The collaborative nature of a wiki therefore supports this aspect in an almost ideal way.

Finally, the project team needed a robust and readily available solution. Wikipedia's software basis is Media Wiki, a free XAMP configuration. BASTIS uses this software and thus profits from several advantages Media Wiki provides: (a) It allows a high degree of display control through the extensive use of templates based upon CSS, (b) it allows detailed control of user rights and thus making it possible to exempt defined areas of the application from uncontrolled editing, (c) it allows integration of images, video and other media including the assignment of copyright schemes, (d) through Wikipedia, Media Wiki is probably the best known wiki system available today, (e) it only has minimal hardware requirements and even runs on most shared hosting servers as long as they provide the XAMP standard configuration, (f) it is free software.

Above, we described the free formatting capabilities (as opposed to a fully structured data scheme) of a wiki system as one of the advantages. However, if one wishes to collate data from several profiles in order to compare or export them, the free formatting can become a serious drawback. Luckily, there is a solution for this problem: Semantic Media Wiki (SMW), developed by Markus Krötzsch and Denny Vrandečić in Karlsruhe (Germany), allows tagging information in a profile and thus giving it a "meaning". SMW can collect the tagged data from various profiles and make them available for display or export at a central place. It is not relevant where the information is being stored, it is only important that it is tagged in a correct way. To avoid user confusion, BASTIS hides most of the tagging code through the use of templates and thus gives the user a clear structure for entering relevant information.

The wiki system is the core element of BASTIS. Two additional modules provide additional functionality. The editors use a weblog (blog) system mostly for announcements and a forum can be used for discussions among users (see Fig. 1). Both modules are also based upon free software making use of the XAMP server architecture. Altogether, the technical configuration of BASTIS provides a maximum of ease of use and functionality at a minimum of cost and has proven to be working well since going online in March 2011.

Fig. 1: Screenshot of the BASTIS starting page ([www.bastis-tourism.info](http://www.bastis-tourism.info), March 21, 2013)



The set of indicators to be covered in BASTIS was developed together with the heritage tourism stakeholders in the BSR. A conceptual model was used to classify the indicators and to make sure that nothing was forgotten due to the bottom-up approach: A travelling person, the tourist, and a region she or he travels to, the destination, are essential for tourism. Other aspects, although they might be important, are secondary. This assumption is in line with a great deal of the tourism literature (e.g. Burkart and Medlik 1981, 42, Seddighi and Theocharous 2002, Pearce 2005). Our approach is to focus actively on these aspects and to describe which central factors determine whether and where tourism takes place (Lohmann 2009). In defining what leads to potential demand and a potential offer in tourism, it refers to the five factors being a prerequisite for tourism: (1) attractiveness, (2) amenities (or facilities) and (3) accessibility on the side of the region to become a destination and (4) ability and (5) motivation to travel on the demand side (Lohmann et al. 1998, 69).

The indicators put forward to use in BASTIS reflect the complexity of today's world by taking into account different aspects of both sides of the medal, supply (destination) and demand (source markets and tourism segments). Hence, the information in BASTIS is structured in thematic sections containing specific, interlinked profiles: Country profiles, with information on (1) tourism destinations in the BSR and (2) important source markets for those destinations; (3) Tourist segment profiles, providing information on special target groups; (4) Heritage site profiles, dealing with the heritage tourism attractions in the BSR (see Fig. 1).

The information processing for the thematic profiles follows a path of scanning for availability, selecting, compiling and reanalysing of existing tourism and socio-economic statistics, reports and surveys (e.g. Eurostat, TourMIS, National Statistical Offices, IMF statistics, CIA factbook, Flash Eurobarometer 258 and 291). Other than e.g. in the Italian National Tourism Observatory (INTO) no primary research is conducted (Nacca et al. 2010).

Obviously, sources with the most detailed, most complete and most harmonised set of data are preferred in the selection process. Yet, other sources, even if only valuable for single or few profiles, are used supplementary. Within each profile this implies that the more comparable sources come first, the more individual sources come second. This procedure needs a lot of effort put on clear references and definitions. To make the information profiles "digestible" for the heritage tourism practitioners on the local level, only the most important data are compiled and analysed, yet clear indications and direct links to the original sources are given if more details are available.

#### **FURTHER LINKS**

<http://bastis-tourism.info>

[http://dl.dropbox.com/u/23683139/fp/FP\\_Sonntag\\_19092011.pdf](http://dl.dropbox.com/u/23683139/fp/FP_Sonntag_19092011.pdf)

[http://www.congress.is/11thtourismstatisticsforum/presentations/Ulf\\_Sonntag.pdf](http://www.congress.is/11thtourismstatisticsforum/presentations/Ulf_Sonntag.pdf)

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