Interreg
CENTRAL EUROPE
European Union
European Regional
Development Fund
BhENEFIT

D.S.S DECISION SUPPORTING SYSTEM MANUAL

INDEX

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I. INTRODUCTION

THE GOAL

The Decision Support System (DSS) for the Management of Historic Built Area is an interactive computer-based information system made by Guide-lines and ICT tool. It combines different parameters and specific heterogeneous data, to suggest criteria and actions for prevention, emergency situations, planning and maintenance in a generic HUA of CE region.

THE USERS

The DSS described in this deliverable is conceived to help Public Administration officers which use the DSS to have a help in management activities of public and private interventions on HBA. Despite that, the DSS can have many different users. Anyone can be potentially interested in consulting it. Consequently, the users could be citizens, professionals, operators, PA technicians, associations, public or private organizations, etc.

DIFFERENT APPLICATIONS

It is expected that professionals and operators consult the DSS to extract information to use as the basis for their technical arguments and designs. Citizens and technicians will consult the platform for their personal interests, to stay informed, to express their opinion, to add data and share information.

HOW TO USE THE D.S.S

The D.S.S is easy to use, it is design for private citizens, associations, organizations and PA technicians that are non-expert: you do not need specific IT skills or software.
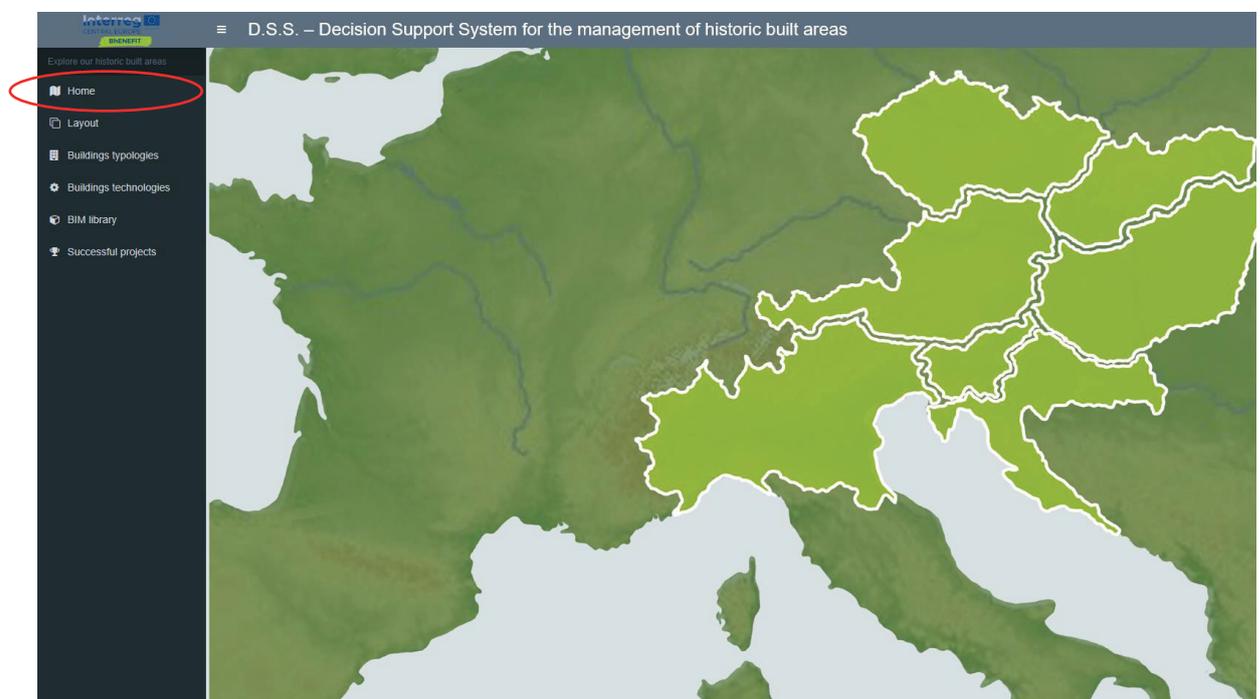
EASY TO USE

You can use it through a pc, Smartphone or tablet. Everything you need is a web browser.

1.1   OPEN THE D.S.S

Open the following link: *http://dss.theclog.net/*. Now you can access the Home section of the site which includes:

- On the left side, a drop-down menu showing the main searchable sections. It is always shown.

THE INTERFACE

- On the right, an overview of the countries collaborating in the project (Italy, Croatia, Hungary, Czech Republic, Austria, Slovenia and Slovakia). After you choose and click on one of these countries, you can read a brief description, written in an easy-friendly way, of the main features of the historical landscape related to that country.

If you want to change section, just choose one of the sections from the drop-down menu on the left and click on it. Below we explore each of the sections to guide your consultation.
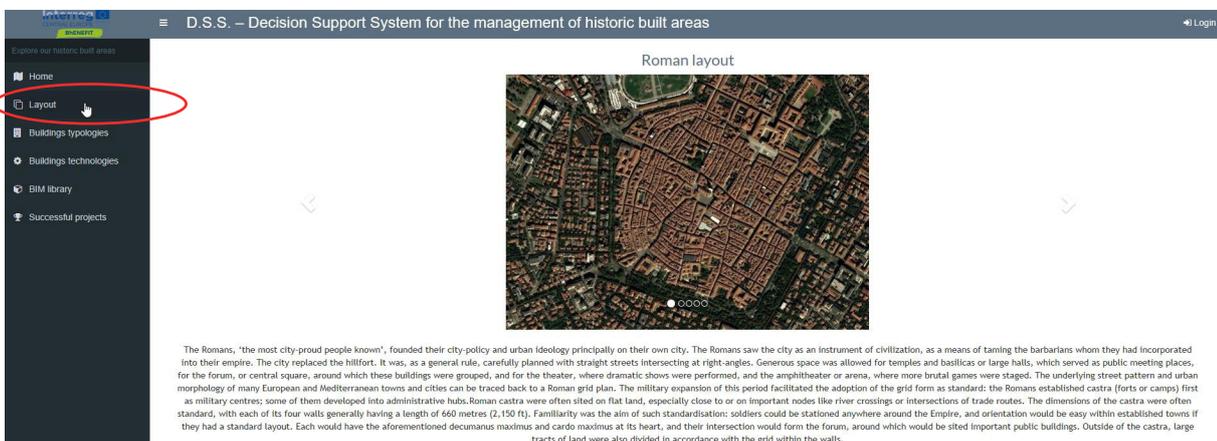
1.2 CONSULT THE LAYOUT

The interface of the Layout section includes three layout which represents three different way in which Central Europe Historic Built Areas were built. Click on "More" or on the pictures you are interested in and you can access specific data and information related to the city's layout (Roman, Medieval, Reinaissance).
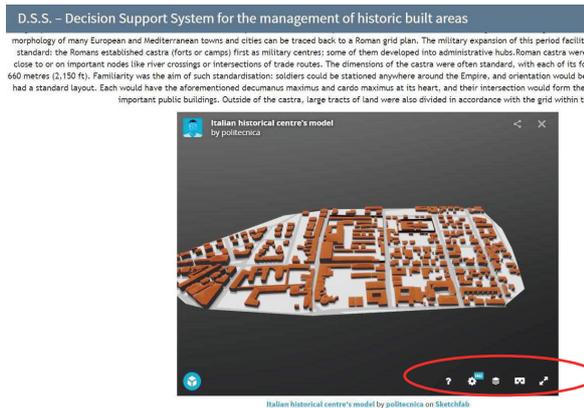
The Central Europe Historic Built Areas could have 3 different origins, according to the period and the cultural context in which they were built. From the picture above it is possible to enter in specific sections, where to find data and info related to every possible city's layout.

For each of the three cases, the information and data are provided in the same way. It will be open an interface including :
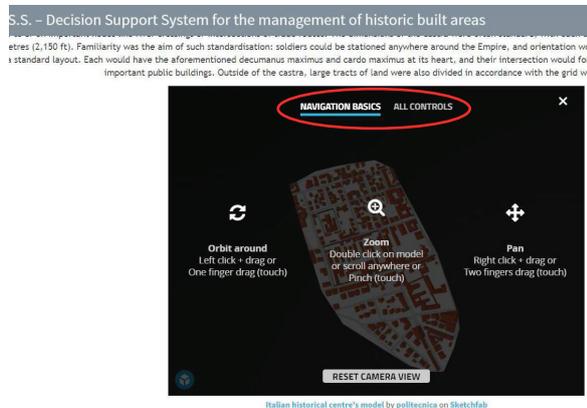
THE INFO PANEL
- On the top of the page, a series of photographs showing examples of the selected layout. You can scroll through the photos by clicking on the arrows on the sides of the image.
- In the middle of the page, a description of the layout.
- At the bottom of the page, a 3D model of the layout.

Roman layout

The Romans, 'the most city-proud people known', founded their city-policy and urban ideology principally on their own city. The Romans saw the city as an instrument of civilization, as a means of taming the barbarians whom they had incorporated into their empire. The city replaced the hillfort. It was, as a general rule, carefully planned with straight streets intersecting at right-angles. Generous space was allowed for temples and basilicas or large halls, which served as public meeting places, for the forum, or central square, around which these buildings were grouped, and for the theater, where dramatic shows were performed, and the amphitheater or arena, where more brutal games were staged. The underlying street pattern and urban morphology of many European and Mediterranean towns and cities can be traced back to a Roman grid plan. The military expansion of this period facilitated the adoption of the grid form as standard: the Romans established castra (forts or camps) first as military centres; some of them developed into administrative hubs. Roman castra were often sited on flat land, especially close to or on important nodes like river crossings or intersections of trade routes. The dimensions of the castra were often standard, with each of its four walls generally having a length of 660 metres (2,150 ft). Familiarity was the aim of such standardisation: soldiers could be stationed anywhere around the Empire, and orientation would be easy within established towns if they had a standard layout. Each would have the aforementioned decumanus maximus and cardo maximus at its heart, and their intersection would form the forum, around which would be sited important public buildings. Outside of the castra, large tracts of land were also divided in accordance with the grid within the walls.

By clicking on the 3D model at the bottom of the page, you can view an interface which allow you not only to observe the model but also to navigate it.

You can move the model simply drag it holding down the mouse button. Navigation basics are provided if you click on the question mark in the Tool bar at the bottom right.

The Tool bar includes tools for basic operations:
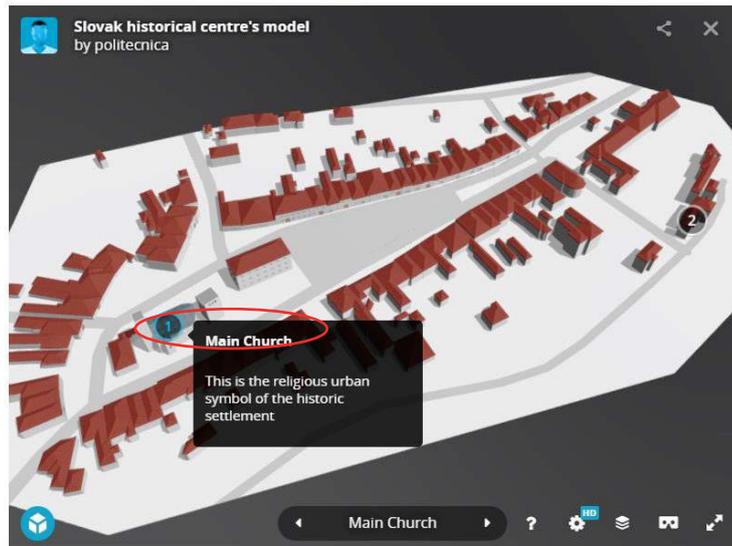- Settings. You can choose whether to set the navigation in Firt Person or in Orbit
- Model Inspector. Allows you to change some modes of displaying the model
- View in VR (Virtual Reality).
- Full screen. You can enlarge the screen.

These operations are basic operations that do not require any type of registration, software or special permission. Everyone can access them.

Two types of alternative operations require registration to **Sketchfab (link: https://sketchfab.com).**

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If you want to be able to leave and share comments on the 3D model video, you can click on the icon at the bottom left "View on Sketchfab".

After you click on it, you will be taken to a web page where you can register for Sketchfab. You can leave comments and view existing comments and observations submitted by others only after registering.

If you want to leave comments to provide information to the 3D model, you must register with Sketchfab and request a specific access to: bhenefit@gmail.com.

Once you are logged in, you can enter additional data and information to the model in the form of comments.

To change the type of layout, return to the previous page by clicking "back" or click again on the reference section to return to the main interface.

Normans in the next five centuries, little remained of urban culture in western and central Europe.Initially, urban culture recovered particularly in existing settl
Roman towns and cities, but later on, ever more towns were created anew. Meanwhile, the population of western Europe increased rapidly and the utilised ag
Urban development in the early Middle Ages, characteristically focused on a fortress, a fortified abbey, or a (sometimes abandoned) Roman nucleus, occurred "lik
whether in an extended village or the centre of a larger city". Since the new centre was often on high, defensible ground, the city plan took on an organic
irregularities of elevation contours like the shapes that result from agricultural terracing.In the 9th to 14th centuries, many hundreds of new towns were built
were enlarged with newly planned extensions. The foundation of monasteries, most of them of the Benedictine Order, also provided nuclei around which trad

Slovak historical centre's model by politecnica on Sketchfab

1.3   CONSULT THE BUILDING TYPOLOGIES

Click on Building Typologies section you can choose between four different types of buildings: Appartements Block, Terraced House, Multifamily House, Single House.

As in the case of layouts, for each of the four typologies, information and data are provided in the same way. Click on the typology you prefer and an interface will be open including :

- On the top of the page, a series of photographs showing examples of the selected building typology. You can scroll through the photos by clicking on the arrows on the sides of the image.
- In the middle of the page, a description of the building typology.
- At the bottom of the page, a 3D model of the building.

By clicking on the 3D model at the bottom of the page, you can view an interface which allow you not only to observe the model but also to navigate it. You can move the model simply drag it holding down the mouse button. Navigation basics are provided if you click on the question mark in the Tool bar at the bottom right.
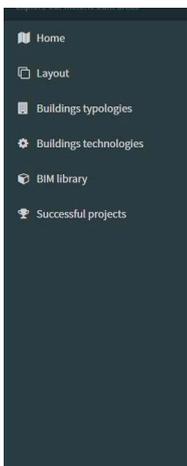
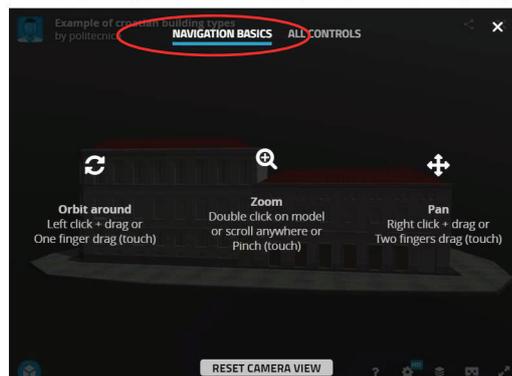THE INTERFACE

The Tool bar includes tools for basic operations:

- Settings. You can choose whether to set the navigation in Firt Person or in Orbit
- Model Inspector. Allows you to change some modes of displaying the model
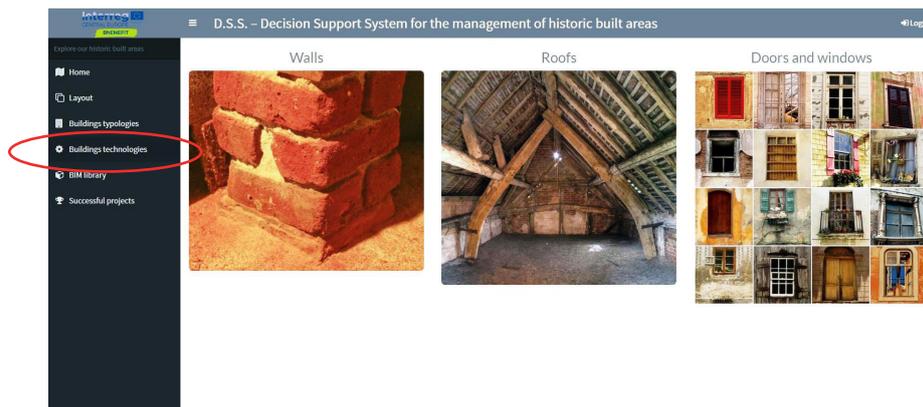- View in VR (Virtual Reality)
- Full screen. You can enlarge the screen.

These operations are basic operations that do not require any type of registration, software or special permission. Everyone can access them.

1.4   CONSULT THE BUILDING TECHNOLOGIES
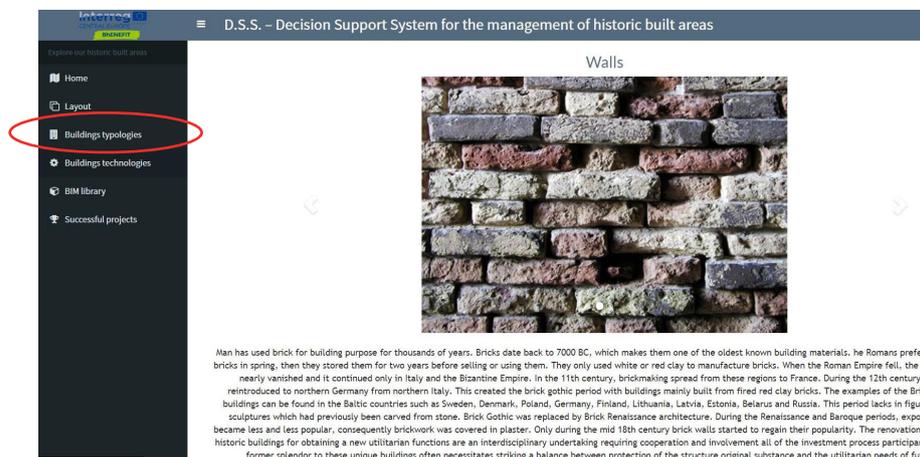
Click on Building Technologies section you can choose between three kind of buildings technology: Walls, Roofs and Doors and Windows.

As in the case of layouts and typologies, for each of the three technology, information and data are provided in the same way. Click on the typology you prefer and an interface will be open including :

- On the top of the page, a series of photographs showing examples of the selected building technology. You can scroll through the photos by clicking on the arrows on the sides of the image.
- Below the photographs, a description of the building technology.

To change the type of building technology, return to the previous page by clicking "back" or click again on the reference section to return to the main interface.
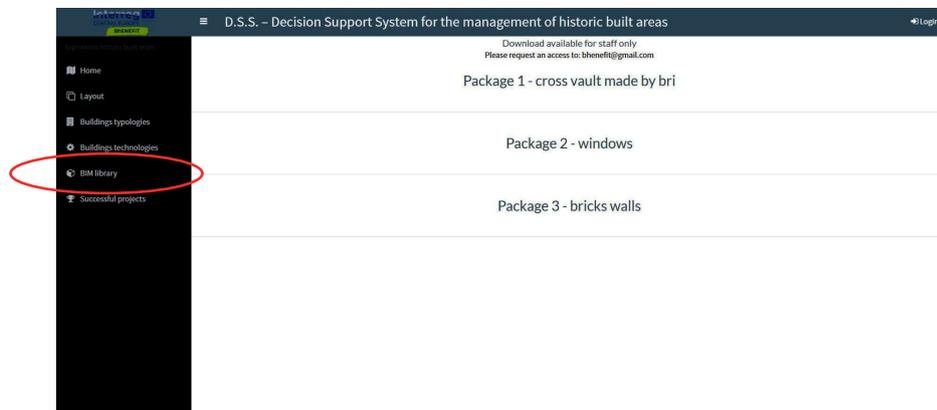
1.5 CONSULT THE BIM LIBRARY

This section includes a series of 3d models:
*   Package 1 - cross vault made by bri
*   Package 2 - windows
*   Package 3 - bricks walls

3D models are only accessible by requesting access to bhenefit@gmail.com.

THE 3D PACKAGES

1.6 CONSULT SUCCESSFUL PROJECTS

THE REFERENCES

In this section you can read about some successful projects in which BIM methodologies have been tested for the protection, conservation and enhancement of the historical and architectural heritage.