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## EVIDENCE APPLICATION FOR PROPERTY MANAGEMENT



### Introduction

The issue of asset management through a period of innovation and new approaches must be linked to the current perception of the life cycle of the building. Offering a number of sources of data and documents for the use of buildings, this is desirable to use.

It is a work with information and geoinformation technologies and the introduction of this issue in the construction and property management. The goal is to learn how to deal with these technologies, how to use them to collect data, how it is stored and incorporated into the maps and subsequently evaluated by means of spatial, architectural and technological evidence, which are used for complex processing of Facility Management (FM) processes. For management support processes are of good quality and up to date evidence crucial. Processes supporting activities are always built on the data about space, property, or may involve the various structural elements and parts of objects.

Information system of cadaster (ISC) used to work with data cadaster. Let's make available to the general public ISC data that is stored in the geodatabase, in the form of interactive maps and information, and financial reporting. Using an Internet browser, you can search for parcels according to various criteria, to obtain information about the owners, etc. The data model ISC contains both descriptive information (data plots, property, legal relations, etc. and also graphical information, i.e. the geometric position of parcels and other property cadaster. the selected plot can view a listing of descriptive information , generated from data stored in a geodatabase that can be printed. ISC allows the use of summary information for effective management of support activities in managing assets, creating a comprehensive spatial passport, passport graphical linking the asset register, implementation processes of the registered property (Informační systém katastru nemovitostí, 2010).

### Passportation

Property management means different administrators need consistent care for this property. Effective use of real property (residential buildings, office buildings, etc.) with the aim of continuous improvement of its technical facilities and equipment, as well as its tech-

nical condition requires precise evidence. The tool, which seeks to ensure maximum effectiveness and efficiency of spending on maintenance and repairs, is the passportization.

Passportisation property is the basis documented technical knowledge of construction - state. Assuming proper application passportization contributes significantly to a maximum of efficiency and economy in the operation and management of the property. Each owner of the building can therefore obtain the necessary condition survey of basic information, such as optimal need of repairs the amount of backlog from previous years in financial terms and units of measure, optimal annual need of repairs by structural elements, for liquidation by order of importance, neglect, exploitation object when deciding on the sale, demolition, reconstruction or modernization, etc. (Beran, 2002).

The passportization is a process involving the preparation of technical documentation into a single system. Evidence represent basic description of the property structure.

Property passportisation includes (**Fig. 1**):

spatial evidence,  
building evidence,  
technical evidence,  
technological evidence,  
...

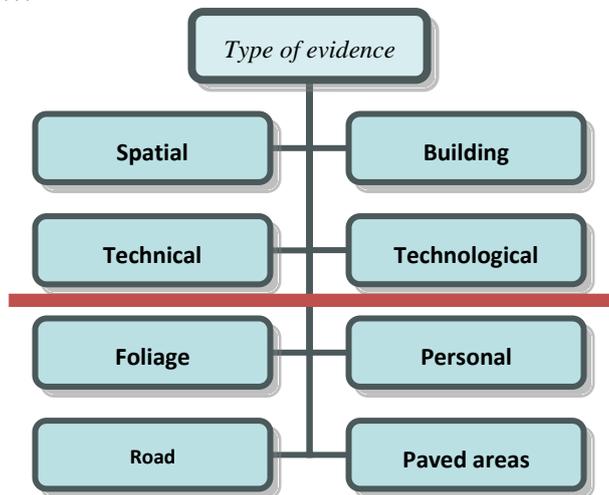


Fig. 1. Types of evidence

Evidence is commonly used other types, such as foliage evidence, roads evidence, paved areas evidence, etc.

Property management and operation of buildings for the effective usage can't exist without complete evidence in electronic form in the correct format, which is the basis for the use of CAFM software tools. Passportization can get a buildings evidence and land, information about the actual condition of the property, graphic drawings, data summarized in the table editor. In addition it may include exterior and interior photos, digital video, etc. The result of passportization is evidence - proof of amenities, providing information on technical parameters, status, usage, etc.

### Evidence

Evidence is one of the documents, which increases the utility and commercial value of buildings and informs users and potential operators in the future that the object was handled professionally in the past that putting resources into its restoration and maintenance can be verified on the basis of the documentation. Evidence is a complex document verified information about the current state of structural and managed object (from individual building design, installation and connection of individual utility networks), which are recorded (collect-

ed) data, on which you can get comprehensive information about the condition and operation of the building. Surveys and the collection of such data is performed the discovery process, which we call passportization.

Spatial evidence is a set of graphical and descriptive data on outdoor surfaces, and adjacent buildings. Unambiguous identification of spatial data and information is essential for the proper use and operation of information systems for which it was established standards of the national information system for territorial identification. This identification was approved by Government Resolution of Czech Rep. No 448/1993. This standard provides a uniform identification in spatial information systems, especially defines a plurality of standard elements of spatial identification (Tománková et al., 2007).

Building evidence describes in detail the building in terms of design, internal organization and the individual areas of the building. It focuses on horizontal, vertical, inclined and roof construction, openings in building construction and also addresses such as doors and windows.

Technical evidence used to describe the property of technically accounting point of view to the level of individual rooms, all technical equipment and other movable property. For each device is recorded basic information about their device manufacturers, service, warranty, etc.

Technological evidence follows the technical evidence, which includes a detailed description of the internal building technology and equipment. In light of the significant breadth of individual technological elements have a passport especially important where there is a need to ensure full security building. Technological passport can be divided into primary and secondary according to the above needs and other needs of users in terms of information sources.

Personal evidence is also used and it includes the placement of individual workers in the workplace and surfaces. Shall be set up where a larger number of employees are. Contains information on individual employees of a facility where they are listed as shift workers and tasks, movements in the workplace as well as personal and telephone number of each employee.

### **Passportation and property management**

Quick access to selected information about plots and buildings registered in the cadaster, including information about their property and information on the status of some management work on the land registry offices is necessary for the performance of asset management. ISC can be taken as an application upgrade for solving various records and agendas in the management of assets which are linked to maps. Spatial evidence helps us to locate the object in the map, various data can be attached as well as documents and images (Kuda, 2008).

### **Conclusion**

Passportisation (existing technical and operational documentation) remains one of the basic tools of financial planning for the recovery and improvement of buildings designed in particular to:

- Economic balance and profitability of the object,
- Requirements for investments and repairs
- Planning and optimization of the cost of maintenance and repair,
- The processing of building energy certificate,
- Comprehensive assessment of the quality of buildings within the life cycle,
- Evaluation of life cycle costs of buildings.

Managed lifecycle of the building requires to be monitored during usage of the facility during its existence, individual interventions documented and evaluated. The passportization

is one of the documents, which increases the utility and commercial value of buildings and informs users and potential operators in the future that the object was handled professionally in the past that putting resources into its restoration and maintenance can be verified on the basis of the documentation.

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