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# Historic development of policies and regulations concerning residential heritage in the Old City of Aleppo

Residential  
Heritage in the  
Old City of  
Aleppo

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## Abstract

**Purpose** – Housing interventions carried out in accordance with current regulations in the Old City of Aleppo, both before and after the Syrian war, are minor in comparison to those carried out without a license and illegally. This suggests current policies are inadequate and needs upgrading.

**Design/methodology/approach** – This article critically reviews current Syrian policies and their implementation on residential heritage in the Old City of Aleppo with the aim to identify gaps and propose directions for modifications. Next to a review of the text of official policies and implementation documents, the archive of the Directorate of the Old City has been consulted and license applications, presented in the period 2018–2022, have been examined. Moreover, interviews with decision-makers from academics and practice were conducted.

**Findings** – Major limitations of these policies and relative application procedures have been identified: these involve: legal/administrative, economic and social aspects.

**Originality/value** – The specific needs have been highlighted and some proposals for improvement made.

**Keywords** Post Syrian War, Old City of Aleppo, Residential heritage, Courtyard housing, Policies, Case study, Interviews

**Paper type** Case study



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## 1. Introduction

Interventions on residential heritage in the Old City of Aleppo, carried out both before and after the Syrian war, have been rarely executed in accordance with current regulations. More often, interventions have been carried out without a license and illegally (Kousa *et al.*, 2021). The long bureaucratic procedures related to the enforcement of the regulations have been identified as one of the main causes that discourage the residents to carry out repairs in a proper way (Kousa *et al.*, 2021).

The efforts of the Directorate of the Old City of Aleppo to up-grade these policies have shown to be ineffective. Moreover, it's debatable whether existing Syrian policies and regulations can be applied to a post Syrian-war context without any change. The extent of devastation, involving 70% of the buildings (Kousa and Pottgiesser, 2019), the urgency for reconstruction and the costly and time-consuming procedures for obtaining permits suggest that policies might need to be significantly modified (Kousa *et al.*, 2021).

In order to provide direction for improvement, a critical analysis of current policies and their implementation procedures is necessary.

In this article, current Syrian policies, and specifically those related to residential heritage in the Old city of Aleppo, are critically reviewed with the aim of identifying obstacles to their application, gaps and improvable points to be considered when advancing proposals for their improvement.

## 2. Research methods

The research methods consisted of an analysis of the historic development of Syrian policies related to intervention on (residential) heritage starting from the 19th century, necessary to understand how and why recent policies and regulations have been established.

Next, a critical review of the current Syrian policies and regulations related to housing in the Old City of Aleppo and the process of obtaining reconstruction and restoration permits in the field has been carried out. This review has been complemented by case studies and by interviews with decision-makers from academia and practice.

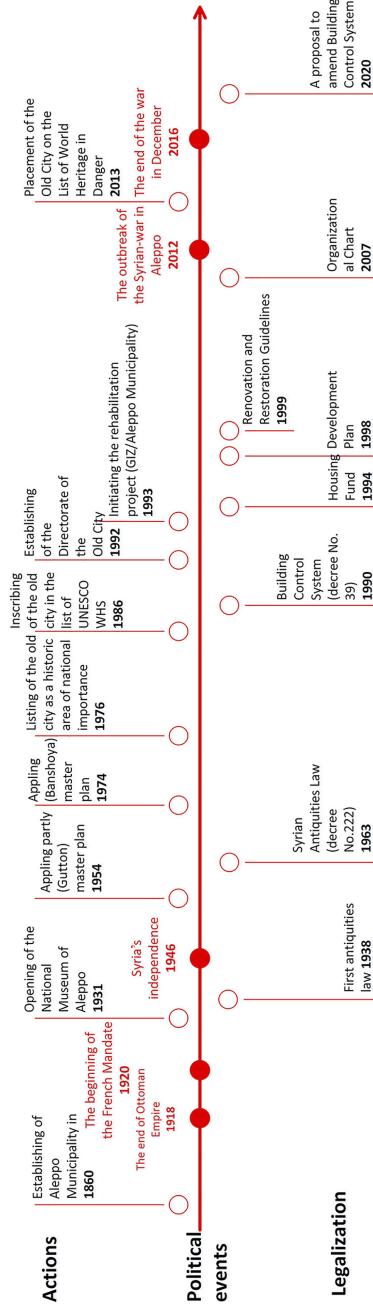
Based on the results obtained, obstacles to the application, gaps and improvable points to be considered in proposals for their modification have been identified.

## 3. Historic background on heritage policies in Syria

In order to understand how and why recent policies and regulations have been established, the historic development of heritage-related policies cannot be ignored. This section provides a short summary of the developments of policies and regulations concerning (residential) heritage in the Old City of Aleppo in the period from the 19th century up to 2020 (Figure 1).

A first regulated approach to residential heritage in Aleppo dates back to the first half of the 19th century. At that time, following the earthquake of 1822 which destroyed approximately 60% of the urban fabric of the Old City of Aleppo, new systems for the administration of endowed buildings were devised. These included, e.g. long-term rents and replacement contracts, meant to attract private capital and facilitate restoration and reconstruction work. Later on, with the Ottomans establishing the first municipal authority in Aleppo in 1866, further radical changes took place in the city's social, administrative, and economic life. The Ottoman law of 1884 dealt with the protection of historical monuments and established the foundations of the work of the Directorate of Antiquities, an institution that developed during the French mandate in Syria (1920-1946) (UNESCO and UNITAR, 2018).

In the early days of the French Mandate in 1923, the French art historian and archaeologist Jean (Sauvaget, 1941), drew up a list of Islamic monuments to be protected in Aleppo and the



Source(s): Author

**Figure 1.**  
Timeline of main political events (full dots) and Syrian policies and related actions (empty dots) in the Old City of Aleppo between 1860 and 2020

National Museum of Aleppo was opened in 1931. Moreover, new master plans were developed with the aim of regulating Aleppo's modern expansion. The initial independence period, following the end of the French mandate in 1946, was marked by radical modernization. In 1954, the master plan of the French urban planner André Gutton, aiming at establishing two major east-west wide axes, was developed and partly implemented. This intervention caused serious damage to one-tenth of the ancient fabric inside the city walls; entire neighborhoods of the old city outside the walls were destroyed and many important historical monuments were lost (Windelberg *et al.*, 2001). In 1954, under the auspices of UNESCO, Syria signed the first Hague Convention and Protocols, which regulates the protection of cultural property in the event of armed conflict (Sarhan, 2014).

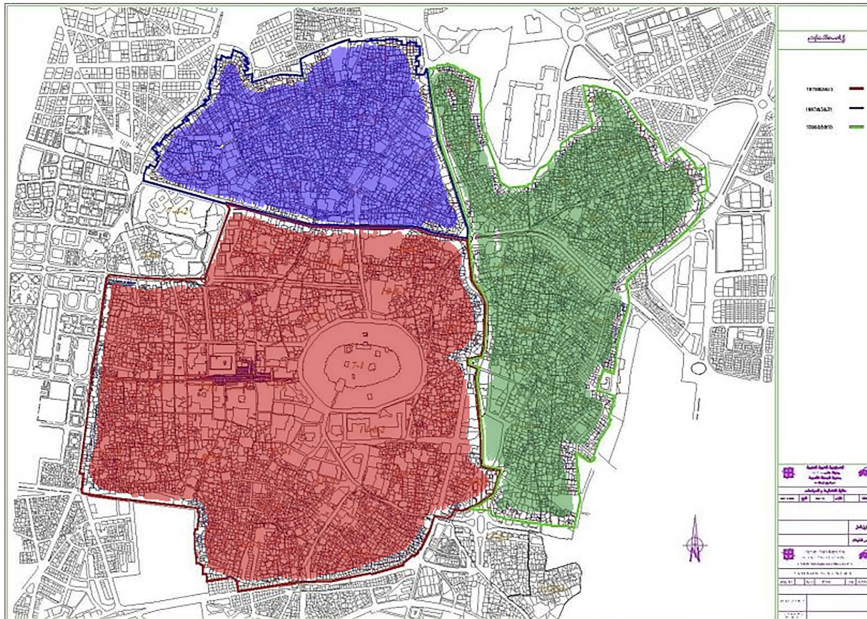
In 1963, the Syrian Antiquities Law No. 222 was enacted: this is the first Syrian law to govern the protection of cultural heritage, with special attention to historic monuments (Syrian Arab Republic, 1999). However, despite this law was already in force, large sectors of some residential neighborhoods were demolished in the 1960s and early 1970s. In this period, random interventions were common in the old city: some neighborhoods were partially destroyed by the implementation of master plans between the 1950s and 1970s and new high-rise buildings were built in their place (Windelberg *et al.*, 2001). The new high buildings under-mined the quality of the traditional houses, by preventing cool winds to ventilate the courtyards and thus negatively affecting their microclimate. In addition, the height difference, which allows a view inside the courtyards from above, deprived the courtyard houses of their privacy (Jaber, 2013). As a result, inhabitants were motivated to emigrate from the Old City of Aleppo to new districts, and light-industrial and commercial functions appeared along the new wide streets.

In the same period, the Japanese urban planner Gyoji Bانشoya suggested to limit the impacts of Gutton's plan. However, he planned a new north-south axis, which would have demolished more monuments and further segregated the historic quarters. His plan met the strong opposition of the society, and its implementation was stopped. Similarly, other proposals, which aimed to open streets in the historical urban fabric or remove areas from the old city, were rejected. In 1976, the General Directorate of Antiquities and Museums (DGAM) declared the whole Old City of Aleppo inside the walls as a historic area of national importance (Khirfan, 2014). In this area, demolition and construction were prohibited, except by order of the authorities. At that point, however, about 25% of the historic buildings had been permanently lost (Khanji, 2017). Following this declaration as a historic area of national importance, Law No. 222 was put into effect to guide and control interventions in the old city, and a Protection Committee was established to supervise its application (UNESCO and UNITAR, 2018) (further details will be described in Section 4).

Between 1978 and 1986, new neighborhoods were added outside the walls of the old city, including the northern part (1983) and, the eastern part (1986). In stages and through a long decision process, the city inside the walls and part of its early expansion, which is now known as the Old City of Aleppo, were declared a UNESCO World Heritage Site (Gaubé and Wirth, 2007) (Figure 2).

In 1990, the Building Control System (decree No. 39) was issued by the Aleppo municipality. This system was the compass guiding the building and conservation works in the old city, and was adopted on the cadastral maps of the Old City of Aleppo dating back to 1927 and 1931 (Aleppo City Council, 1990).

Following this declaration as a UNESCO World Heritage Site, the Old City Technical Committee was formed and the Directorate of the Old City (DOC) was established in 1992. In 1993, in collaboration with the Gesellschaft für Technische Zusammenarbeit (GTZ), (DOC) developed an integrated project for the old city. Later on, other international organizations were involved, e.g. Arab Fund for Social and Economic Development and Aga Khan Trust for Culture (UNESCO and UNITAR, 2018).



**Note(s):** ● The Old city inside the walls (1978), The Old city outside the walls  
● the northern part (1983) and, ● the eastern part (1986)

**Source(s):** Adapted by author

**Figure 2.**  
Stages of inscribing the  
Old City of Aleppo on  
the World Heritage List

Following a rigorous inspection of the factors that contributed to the deterioration of the old city's urban fabric (1993–1997), in 1999, the Development Plan for the old city was completed and the strategies and tools used for implementation were defined (Knefaty, 2015). Especially with regard to housing, a survey conducted in 1993 on Old Aleppo households showed that approximately one-third of the total housing stock was in such poor conditions that structural repair was urgently needed to avoid collapse. In response to the urgent need for action, in 1994 the rehabilitation project established a micro-credit scheme (housing fund) (Fischer and Gangler, 2012).

In 1999, the Syrian Antiquities Law No. 222 was amended to address the protection of the old city and the treatment of encroachments on it (Syrian Arab Republic, 1999). Aleppo's organizational chart and the building control system of the Old City of Aleppo were released in 2007 (Aleppo City Council, 2007).

In the summer of 2012, the Syrian civil war escalated in Aleppo and resulted in the city being placed on the List of World Heritage in Danger in 2013 (Hinze and Richard, 2013). In December 2016 the city's conflict came to an end, leaving massive destruction in its aftermath. In January 2017, UNESCO conducted a rapid assessment mission to Aleppo to evaluate the damage to its World Heritage Site caused by the Syrian Civil War. During a meeting held in Aleppo in January 2019, the "Vision and Planning Framework" for the reconstruction and recovery of the property was presented. This framework includes key-objectives, such as developing a reconstruction and recovery plan, establishing a new governance and planning framework with special area plans, building operational and financial tools for reconstruction and recovery, and financing reconstruction within a specified timeframe. The document also emphasizes the need to reassess the property's integrity and

authenticity, in light of the damage. However, no corrective measures or timeframe for their implementation have been identified (UNESCO, 2019). In 2020, a project to amend the building control system in the Old City of Aleppo was proposed (Aleppo City Council, 2020). It is worth mentioning that in February 2023, UNESCO led a mission to Aleppo to learn about the city's rescue needs, because of the earthquake that hit the area on February 6, 2023.

## 6

### 4. Current laws and procedures applicable to residential heritage in the old city of Aleppo

This section includes (1) a comprehensive description of currently valid Syrian policies and laws, promulgated between 1963 and 2020, with a focus on those applicable to residential heritage buildings in the Old City of Aleppo; (2) classification of residential buildings; (3) responsible authorities and their role in the application process for license; (4) application process for license.

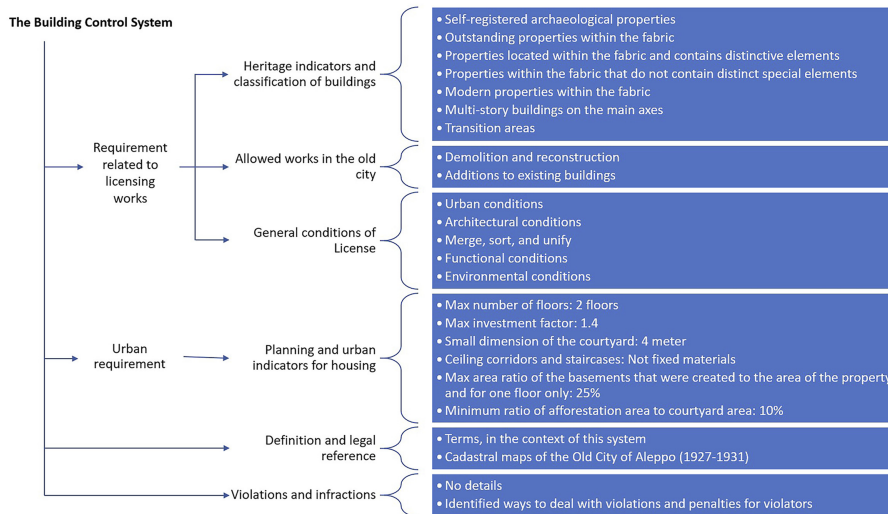
#### 4.1 Policies in the old city of Aleppo

4.1.1 *Syrian Law of Antiquities 1963 (decree No. 222), amended in 1999.* The Syrian Law of Antiquities No. 222, in place since 1963, is the main policy regulating all heritage management issues in Syria. After the Old City of Aleppo was inscribed on the UNESCO World Heritage List in 1986, the Antiquities Law was updated in 1999 to address the old city's protection and deal with infractions. According to this law, all immovable properties built by man more than two hundred years ago are considered "antiquities" and fall thus under the jurisdiction of the antiquities authorities, which are represented by the General Directorate of Antiquities and Museums (DGAM). Properties from a more recent period which have historical, artistic, or national characteristics may also be considered antiquities, if the Antiquities Council has given its approval and a ministerial decision to register them has been issued. A group of neighborhoods, buildings, one building, or a portion of them may be included in this decision.

Ownership of land does not confer the right to dispose of any immovable antiquities that may exist on its surface or within its confines. Immovable antiquities include historic buildings, such as traditional houses. This law does not consider interventions on antiquities. Anyone who modifies an antiquity without permission faces penalties (Syrian Arab Republic, 1999).

4.1.2 *Building Control System 1990 (decree No. 39), amended in 2007.* The Building Control System is a set of regulating laws to prevent uncontrolled interventions in the Old City of Aleppo. This system was developed based on Resolution No. 39 of 1990. It consists of 10 chapters, that this paper classified into four basic levels of (1) definitions and legal reference; (2) urban requirements; (3) requirements related to licensing works; (4) violations and penalties (Aleppo City Council, 1990, 2007). Figure 3 summarizes the content of the Building Control System, with a focus on building classification and the aspects connected to residential heritage in terms of urban indicators.

According to the Building Control System, any change in the Old City of Aleppo requires a license. Owners of buildings can apply for a license for restoration ("ترميم") and/or rebuilding ("إعادة البناء") provided that the original external boundaries of the properties are respected and the internal architectural spaces, as specified on the cadastral map, are kept. The cadastral map, dating back to 1931 and has never updated, serves as basis for determining the planning and elevations of properties in the old city. Restoration refers to work done on buildings whose structures are not permitted to be demolished. Rebuilding is the process of rebuilding buildings whose structures are permitted to be demolished because of building safety (Aleppo City Council, 2007).



Source(s): Author

**Figure 3.**  
The content of the  
Building Control  
System of the Old City  
of Aleppo

According to the Building Control System, it is permitted to entirely or partially demolish buildings in the Old city only in exceptional circumstances, depending on their classification, solely with the requirements of construction safety, and with the approval of the relevant authorities. In the case of partially destroyed buildings, the damaged parts must be rebuilt in an original state using traditional materials.

Additions to existing buildings can only be applied to buildings with residential and tourist function. It is not permissible to demolish or alter the basic architectural elements such as iwan, decorations, etc. in any way. The additions should consider the continuity of the original building material, using minor differences to make visible a distinction between the original material and the updated one.

All work on heating, air conditioning, solar energy, and communications systems must be approved by City Council management and done in accordance with restoration standards. These last include the technical conditions and dimensions of the architectural elements, the quality of materials, and the method of use.

*4.1.3 Restoration with the help of the Housing Fund 1994.* From 1994 to 2006, the Municipality of Aleppo, in collaboration with the GTZ project "Rehabilitation of the Old City of Aleppo," was able to secure financial resources for restoration through emergency and rehabilitation loans, with local and international support from a number of organizations, in the form of donations or investments. Initially, the micro-credit scheme ("emergency fund") was reserved for the most urgent residential repair works on residential heritage. The primary target group consisted of families living in extreme poverty in the Old City. Overall, the Emergency Fund began financing housing with an amount of fifty thousand Syrian pounds without additional benefits, in addition to providing the necessary technical advice and facilitating licensing procedures. The Emergency Fund contributed until 2001 to the restoration of more than 270 housing units. In 1997, a second, larger credit scheme ("rehabilitation fund") allowed homeowners or tenants to engage in larger rehabilitation work. This fund targeted the attention to the restoration of distinctive architectural elements and the addition of service facilities in the housing, according to the building control system. An outright grant of one hundred and fifty thousand Syrian pounds was allocated without

recovering any part of it, in addition to providing the necessary technical advice and facilitating licensing procedures. This second fund was initially restricted to the projects in pilot areas for which detailed master plans had been developed (Bab Qinnasreen, Al-Farafra and Al-Jdayde neighborhoods). Both funds were merged into a single "Housing Fund" in 2004, and the area interested expanded to include the entire Old City. Besides, technical support for construction works was provided free of charge until 2006 and included a cost estimate, engineering advice on construction and restoration techniques in accordance with building regulations, and construction work supervision.

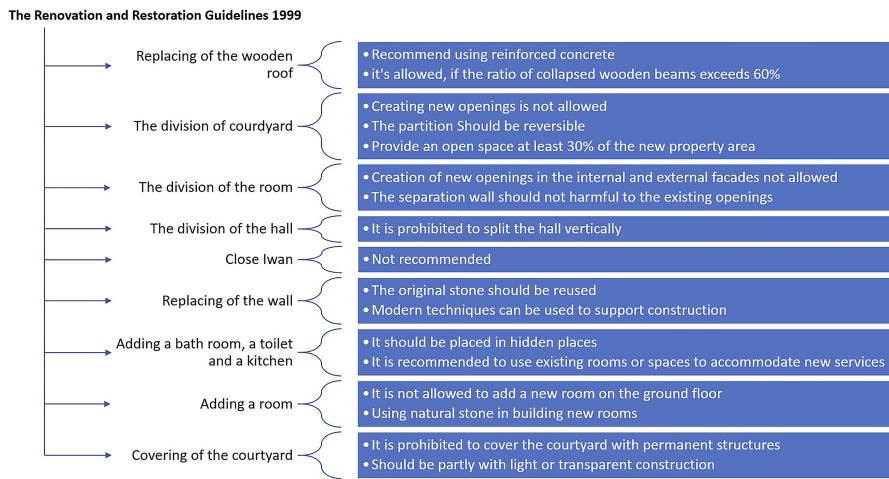
A Technical Committee formed by a municipal decree was involved in the issuance of restoration permits, in addition to the core team from the fund section. The committee was in charge of reviewing applications at regular meetings, identifying issues that need clarification during inspections, and approving or rejecting applications (Fischer and Gangler, 2012).

*4.1.4 Development plan 1998.* Within the framework of the rehabilitation of the Old City of Aleppo project, a comprehensive development plan was issued; this provides a general framework and includes ten strategies for upgrading the historical urban fabric in line with the scope of sustainable development. This article focuses on the strategy related to housing and social development. This strategy aimed to improve the conditions of the housing stock in the Old City of Aleppo and operated on two levels: (1) improvement of quality of single residential buildings and (2) improvement of overall quality of residential neighborhoods, based on the assumption that rehabilitation of the housing stock is crucial for urban conservation and development.

By improving the living conditions, this strategy aimed to reverse the trends of migration and to contribute to the preservation of the residential function in historic neighborhoods. Unfortunately, the actual achievements were limited and negligible compared to the size of the Old City and its population (Windelberg *et al.*, 2001).

*4.1.5 The Renovation and Restoration Guidelines 1999.* In 1996, an additional informal framework of laws, the Renovation and Restoration Guidelines were developed and formally adopted in 1999. These Guidelines were developed by local experts in collaboration with the Gesellschaft für Technische Zusammenarbeit (GTZ), as a comprehensive guideline for all interventions in the traditional houses in the Old City of Aleppo. They consist of a set of standards, including a list of detailed criteria for restoration of housing elements, with a focus on preserving these elements and using traditional construction techniques and materials. These guidelines were drafted in accordance to the principle of the Venice Charter (GTZ, 1999). The renovation and restoration guidelines have been incorporated into the Building Control System as binding requirements. These guidelines can improve the accuracy of decision-making, as the Building Control System 1990 (decree No. 39) does not address specific scenarios, such as the allowable changes to the building and the specific principles for each building component. More details are given in Figure 4.

*4.1.6 Building control system (proposal 2020).* Following the devastation caused by the Syrian war, amendments to the Building Control System were proposed in 2020, this system incorporates conditions for reconstruction that are similar to those in the old system. However, it allows for the use of modern technologies and appropriate materials in the reconstruction of property. In the absence of necessary documents for reconstruction, the system permits designing structures that resemble buildings with a similar function during the original era of construction. In related to general conditions for licensing, in particular urban conditions, the system is concerned with preserving public spaces, mainly limited to preservation of the facades overlooking public spaces, and prohibits any intervention of them without permission from special committees. One of the shortcomings of this system is that it fails to provide guidance on how to handle the buildings to be rebuilt, which could result in non-uniform application of the conditions (Aleppo City Council, 2020).



**Source(s):** Author

**Figure 4.**  
Main regulations in the  
Renovation and  
Restoration  
Guidelines (1999)

#### 4.2 Implementation of the laws

In this section, the implementation of the laws reported in [Section 4.1](#) is analyzed. In order to understand this complex process, the classification of housing is reported, the responsible authorities are identified and the process of requesting a license for intervention on a residential heritage building located in the Old Aleppo city is elucidated.

**4.2.1 Classification of houses and allowed interventions.** According to Guidelines 1999 and Development Plan, residential buildings are classified as follows ([GTZ, 1999](#)); ([Windelberg et al., 2001](#)):

- (1) Important historic residences (palaces),
- (2) Historically valuable houses,
- (3) Houses with historically valuable architectural features,
- (4) Houses without historical importance.

Depending on the building's categories, different types of interventions are allowed or not with respect to specific condition, as reported in [Table 1](#).

**4.2.2 Responsible authorities.** Several authorities are involved in rehabilitation of residential heritage building located in the old city. The responsible authority at the national level is the Presidency of the Council of Ministers; the involved ministries are the Ministry of Culture, Ministry of Tourism, Ministry of Endowment "Awqaf," and Ministry of Local Administration and Environment. These are represented by the Aleppo Governorate's affiliated institutions or Directorates, which are the Antiquities and Museums Directorate, Tourism Directorate, Endowments Directorate and the Municipality of Aleppo ([Figure 5](#)). The Directorate of the Old City (DOC) was established under the Municipality of Aleppo to guide the rehabilitation of the old city. It includes three departments (the department of permits, emergency and monitoring, the department of implementation and maintenance, and the department of urban studies and planning) covering studies and planning; permits and monitoring, and implementation and maintenance ([Figure 6](#)) ([Knefaty, 2015](#)).

The involvement of authorities in the rehabilitation of a building depends on the ownership of the building.

**Table 1.** Residential building categories and allowed interventions are summarized based on restoration guidelines and development plan

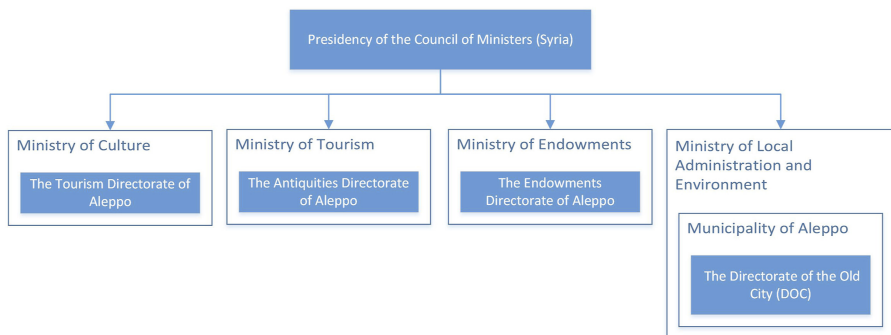
House category	General principle	Replacement of original materials	Partitioning of floor plan
(I) Important historic residences (palaces)		Not permitted (exceptions require examination)	Not permitted (exceptions require examination)
(II) Historically valuable houses	Houses should be restored as closely as possible to their original state	Permitted in case of structural safety, with permission of the Antiquities Department	Permitted provided original materials are not damaged
(III) Houses with historically valuable architectural features	Valuable architectural elements should be restored in accordance with the guidelines	Permitted for not valuable architectural elements, provided historically significant architectural elements are preserved	Permitted in accordance with the guidelines
(IV) Houses without historical importance	The facade should be restored according to the historical ideal model	Permitted	Permitted in accordance with the guidelines

**Source(s):** Author

4.2.3 *Process from application to completion.* In this section, the application process for obtaining a license for intervening on a residential building in the Old City of Aleppo is described. In the case a resident decides to restore or rebuild his/her house, a request must be submitted to the DOC before any action is taken. More specifically, the request needs to be submitted to the single window initiative (one-stop-shop) which is aimed at facilitating the procedures of obtaining licenses, making it easier for residents. The single window system allows residents to submit all necessary documents and applications in one place, which reduces the time and effort required to obtain permits. This initiative is a tool of the Development Plan’s strategies. Afterwards, the DOC makes an on-site investigation and takes a preliminary decision on whether to approve the project or not, according to Syrian laws (Table 2).

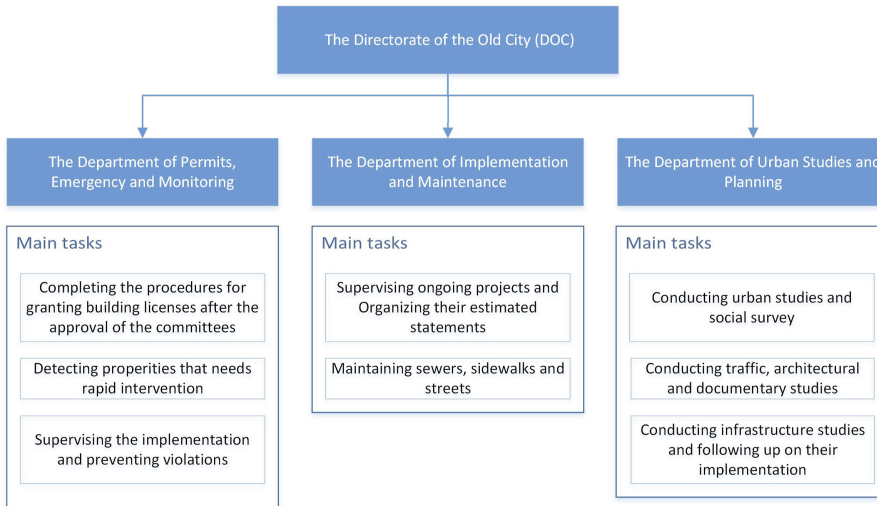
In addition to what is stipulated in the Building Construction System, the procedure steps mentioned below must be followed when requesting a license for restoration or rebuilding:

- (1) A license application is prepared by the resident and submitted to the DOC. This request should include (1) a description, photographs, architectural plans for the current situation of the building, illustrating the problems; (2) architectural plans for the proposed situation, certified by the engineer who conducted the study, and a report justifying the request to restore or rebuild in whole or in part.



**Figure 5.** Authorities involved in decision-making regarding the development of the Old City of Aleppo

**Source(s):** Author



**Figure 6.** Organizational structure of the (DOC) and main tasks of the different departments

Source(s): Author

- (2) The office of the Old city inspects the property subject of the application and prepares a detailed report with justified suggestions. In addition to a review of the license request, this detailed report, prepared by the office of the Old City, must include (1) a list of the parts that are subjected to be restored or rebuilt, the interior additions that must be removed and detailed pictures of the ceiling, windows, etc. (2) proposals for to be rebuilt parts, including heights and sizes, considering e harmony with the surrounding area and preservation of underground connections.
- (3) The license request and the report by the office of the Old city are submitted to the Technical Committee, this committee provides a recommendation.
- (4) The Directorate of the Old City issues the license, following the recommendation of the Technical Committee and paying the fees.
- (5) Depending on the type of work residents need to do there are some limitations:

House category	Procedures	Responsible authorities
(I) Important historic residences (palaces)	- A historical study - A study of all interventions by experts in accordance with the principles of the Venice Charter	Technical Committee and Antiquities Directorate
(II) Historically valuable houses and (III) Houses with historically valuable architectural features	- A study of all interventions by experts in accordance with the principles of design criteria	Technical Committee
(IV) Houses without historical importance	- A study of the facades, which are the main element with direct influence on the old quarter	Technical Committee

Source(s): Author

**Table 2.** Residential building categories, related procedures and responsible authorities

- (6) In the case of excavation works in connection with construction or demolition works, these are supervised by a representative of the Directorate of Antiquities and Museums, and carried out under the supervision of an architect from the DOC, who submits a weekly report to the DOC.
- (7) In case of demolition, alteration of the building or part of it, or change the use of any property without the necessary license, the property is sealed with red wax, and the violator is due to return the property to its original condition. In the event of refusal of returning the property to its original condition, the city council shall return the property to its original condition at the expense of the person concerned, with a seizure sign placed on the property until the re-turn expenses, in addition to the fees and fines incurred, are collected (Aleppo City Council, 1990).

In the above-mentioned procedure steps, many authorities are involved in the process, and a detailed application legislation is used to explain the entire procedure and the role of the responsible parties (The Directorate of the Old City, 2007). (Figures 7 and 8) illustrate the whole procedure (two phases) and the responsible parties involved in each step.

#### 4.3 Review of case studies and expert interviews

4.3.1 Case studies. The case studies research consisted in the analysis of request of license for intervention on residential heritage buildings in the Old city, presented in the period 2018–2020 and found in the Directorate of the Old City archive.

In Winter 2020, the archives of the Old City Directorate were consulted. 107 licenses for residential buildings were granted in 2018, 81 in 2019, and 92 in 2020. The number of licenses required over a three-year period is small in comparison to the number of residential buildings in Aleppo's old city, which is approximately 1,600. This can be explained by residents refusing to return to the city's neighborhoods and by the fact that owners often carry out interventions without licenses. 16 cases were examined (Table 3) and selected based on the following criteria:

- (1) Licenses for different types of intervention (reconstruction and restoration work).
- (2) Presence of building violations (old/new).
- (3) Types of ownership: full ownership, co-ownership and endowment ownership.

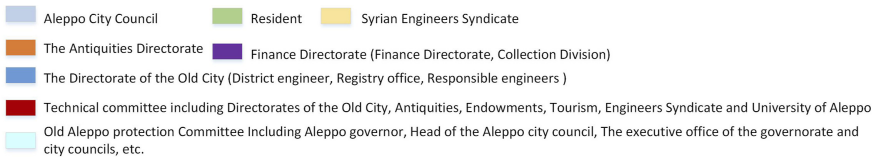
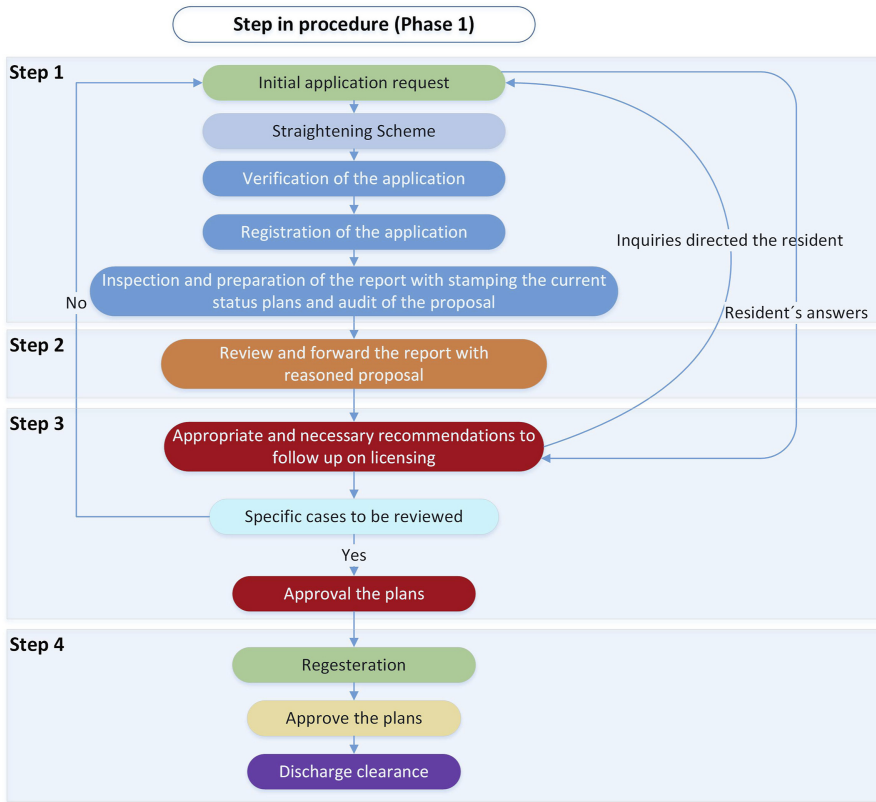
Based on the examined cases the following conclusion can be drawn:

- (1) The applicants are most often the owner.
- (2) In the case of co-ownership, if one or more owners are not present, the remaining shared owners must submit a pledge to the Aleppo City Council agreeing to bear all of the restoration's consequences and effects.

In case of endowment ownership, the tenant must apply to endowment directorate before beginning the licensing procedures to obtain "no objections" to the restoration work.

- (1) The main reasons for requesting a license are minor restoration work, restoration or rebuilding.
- (2) The licensing procedures can take from one month for minor restoration works to six months or more for restoration and rebuilding.

The restoration guidelines 1999 are followed in the minor restoration works, while the rules reported in the Building Control System and its appendixes are followed in the restoration and rebuilding works.

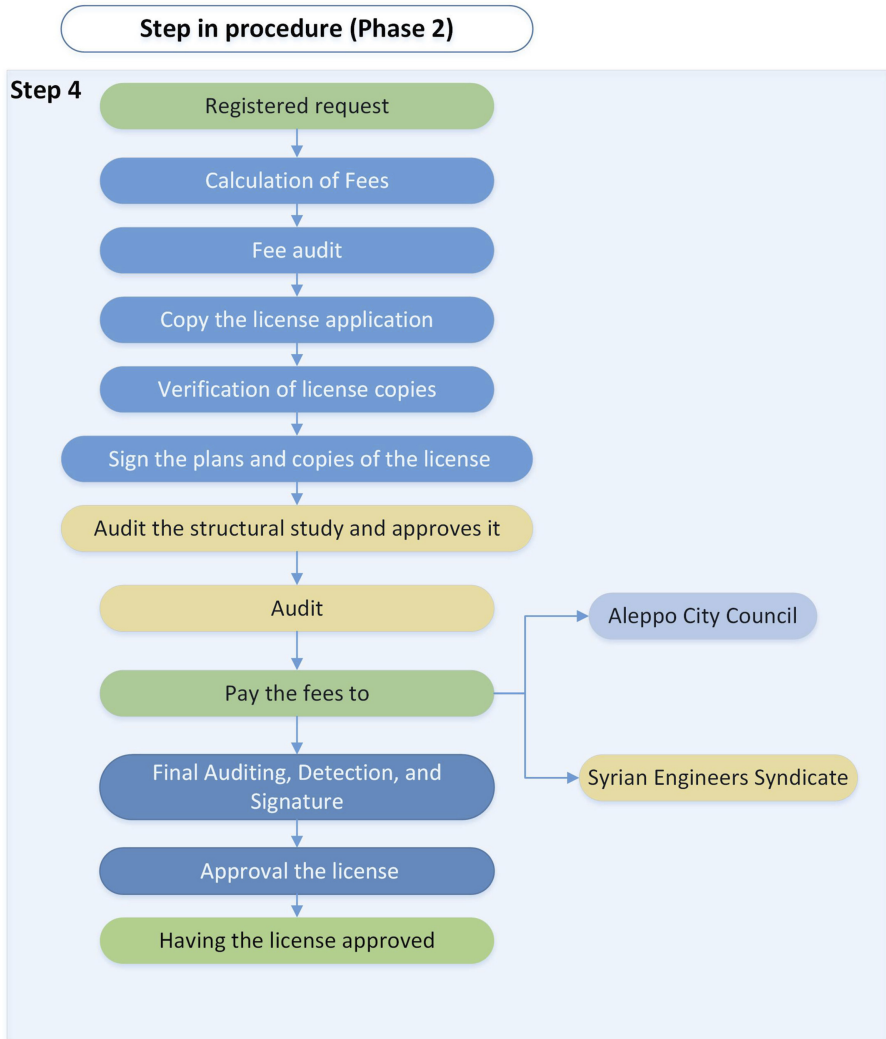


Source(s): Author

**Figure 7.** Steps in procedure and responsible parties by colors in the first phase of the approval process of the license, according to Building Control System and its application legislation

- (1) The license is valid for six months for minor restoration works, but one year for rebuilding.
- (2) Many institutions, including the Aleppo City Council, the Technical Committee, the Directorate of the Old City, the Directorate of Antiquities and Museums, the Syndicate of Engineers, the Directorate of Finance, and the Police, are involved in licensing procedures and monitoring implementation.

**4.3.2 Interviews.** A diverse group of participants with a range of academic and professional backgrounds having a variety of perspectives were selected based on their presence in Aleppo and their involvement with the current reconstruction process. The participants from academia included historians, professors and faculty members from the



**Figure 8.** Steps in procedure and responsible parties by colors in the second phase of the approval process of a license, according to Building control system and application legislation

- Aleppo City Council
- Resident
- The Directorate of the Old City (Technical Assistant, Fee Auditor, Transcriber, The Department of Licensing and Monitoring, District engineer, Head of Old Aleppo Directorate)
- Old Aleppo protection Committee Including Aleppo governor, Head of the Aleppo city council, The executive office of the governorate and city councils, etc.
- Syrian Engineers Syndicate (Structural engineer, Head of the department)

**Source(s):** Author

Faculty of Architecture and engineers who have a master's degree in the field of Archaeology and Rehabilitation of Historic Cities. Additionally, the group from practice included practitioners such as the director of the Directorate of Antiquities and Museums of Aleppo,

Case study	Average duration of licensing procedures in months		Type of license		Validation of the license		Applied law		Procedures											
	One	Three	Minor restoration	Six restoration	One year	Six months	Restoration guidelines	Building control system	Syrian antiquities law	Property registration request	Straightening scheme	Stipulating License request	Architectural inspection and proposal	Payment of fees	Quittance	Submit a rebuilding proposal	Study the proposal	Approval	Control of work by the directorate of antiquities	Control of work by police
1068	•				•	•	•		•	•		•	•					•	•	
3033	•		•		•	•	•		•	•		•	•					•	•	
1702	•		•		•	•	•		•	•		•	•					•	•	
2216	•		•		•	•	•		•	•		•	•					•	•	
2133	•		•		•	•	•		•	•		•	•					•	•	
4113	•		•		•	•	•		•	•		•	•					•	•	
1651		•			•	•	•		•	•		•	•					•	•	
3157		•			•	•	•		•	•		•	•					•	•	
485		•			•	•	•		•	•		•	•					•	•	
1437		•			•	•	•		•	•		•	•					•	•	
632		•			•	•	•		•	•		•	•					•	•	
3850		•			•	•	•		•	•		•	•					•	•	
4008		•			•	•	•		•	•		•	•					•	•	
1985		•			•	•	•		•	•		•	•					•	•	
1844		•			•	•	•		•	•		•	•					•	•	
320		•			•	•	•		•	•		•	•					•	•	

Source(s): Author – data collected in the field work at the Old City of Aleppo (2020/2021)

**Table 3.**  
Analysis of the selected case studies

members and the director of the Directorate of the Old City, the president of the Al Adeyat Archaeological Society, technical committee members, economists, members and the chairman of the real estate involved in the reconstruction of some projects in the Old City, the director of the Citadel of Aleppo, contractors who have experience in the restoration of numerous historic buildings in the Old City and engineers who have received awards for their work on reconstruction projects in the Old City.

During interviews, a series of open-ended questions were asked and topics for discussion were raised using an interview guide. The following topics were covered: barriers to the implementation of Syrian legislation related to residential heritage, and barriers to the successful implementation of sustainable housing restoration and/or rebuilding. Regarding the barriers to implementation of Syrian legislation on residential heritage, all respondents agreed on the need to upgrade the Syrian legislation. Specifically, they highlighted the need to reduce the restrictive and bureaucratic procedures that hinder the issuance of licenses.

Some experts from academia pointed out that too many committees are involved in the approval process, and the lack of knowledge among certain committees or certain committee members hinders licensing procedures.

Experts from practice reported that the Building Control System is an inapplicable law, as it is better suited for museum artifacts rather than for restoration or rebuilding of housing. They also referred to the exceptions and violations of the laws by other government agencies, such as the Ministry of Education, Ministry of Tourism and the Ministry of endowed "Awqaf" which own some buildings. These exceptions are often due to corruption or other interest. According to experts, measures to modify the building control system and simplify procedures have been initiated, but they are few and ineffective.

Regarding the barriers to the successful implementation of sustainable housing restoration and/or rebuilding, experts were asked whether they thought that the restoration and/or rebuilding of the residential heritage has been approached from a sustainability standpoint, and whether successful initiatives had been taken to meet the requirements outlined in the Development Plan 1992 because of the Development Plan's time limitations.

The experts from academia emphasized that the topic of sustainability is a wide-ranging topic which requires expertise, which is currently lacking. They also pointed out that the current legislations for the Old City do not address the issue of sustainability, especially in regards to social aspects. Despite the brief mention of sustainability in the Development Plan's strategies, almost all respondents reported that no social aspects were considered in the implementation of these strategies. Although a survey conducted on Old Aleppo households in 1993, only one respondent mentioned a social survey conducted as part of the Pilot Project in Al-Fayadah Neighborhood, which was part of the GTZ/Old Aleppo Revival Project, as a preparation phase prior to the issue of the Development Plan.

There was conflicting opinion among the experts interviewed about the role of the community in decision-making. From the point of view of the interviewed academics, involvement of residents in decision making is crucial for the implementation of programs that meet the needs of the community. Differently, from the perspective of the responsible authorities, residents are partners not in decision-making, but in notifying the mukhtars [1] about their problems that need to be addressed.

The respondents, including experts from academia and practice, were also asked to comment and explain the reasons for barriers to the use of alternative energies. The experts from academia cited there is no objection to the use of alternative energies, but because of their high expense and the lack of specific rules, the alternative energies are not provided.

The experts from practice stated that institutions do not have the capacity to rebuild houses, so it is a privilege and unrealistic to secure resources such as solar energy.

When asked whether restoration and/or rebuilding of the residential heritage can be reconciled with broader recovery plans that address sustainable development, and about the main challenges that the laws need to address in this regard,

All respondents reported that only the physical aspect is currently being worked on. While “revival” should include social, health, environmental, and economic factors, these aspects are not addressed by the law and are being ignored in practice.

Other experts, primarily economists, pointed out that the sanctions imposed on Syria have resulted in an increase in prices that are not proportionate with people’s income. At the same time, the cost of enforcing the regulations is high and transferring money to Syria, is complex, particularly since the adoption of Caesar’s legislation, which in turn led to the declining economic condition and rising exchange. As a result, many people in the Old City have lost hope and want to leave.

## 5. Discussion and conclusion

This research critically reviews of the current policies and their development during time, and assesses their current application by means of an analysis of some case studies and of interviews with key-actors in the process, such as authorities and decision-makers from academia and practice. The main goal of this research is to identify gaps and improvable aspects in current policies and their application, to be considered when advancing proposals for their improvement.

The policies and their application have shown to have some major limitations, concerning legal/administrative, economic and social aspects.

A first problem of the policies is the long bureaucratic procedure (up to six months) needed for any intervention. This can be particularly challenging in the cases of co-ownership, i.e. when buildings are owned by Endowment Ministry or different parts of the same building are owned by different persons, who are often not resident anymore in Aleppo. Streamlining the procedure, such as reducing the number of steps and institutions involved in the licensing process, could help to speed up the intervention and encourage owners to follow the prescribed procedure. Additionally, legal clarification of the ownership structure is an important and essential component of reconstruction.

When analyzing the current policies and application in the case studies, they appear to be not flexible enough to accommodate to the needs of the residents, which have evolved in the last decades. Until today, the entire building asset in the Old city is subjected to the Syrian Law of Antiquities (1963); this prescribes strict protection measures that do not take into account contemporary living needs. For example, regulations do not allow or restrict some types of intervention, such as installing heating systems, adding service spaces, etc. which are among the most common reason for intervention (Kousa *et al.*, 2021). Possibly, alternative policies focusing on requirements and quality of the interventions rather than prescribing specific techniques and materials could provide some flexibility while still preserving historic values.

In general, it emerges that a lack of knowledge negatively affects the policies. First of all, not enough information is available about the residential heritage, and even less about their state of conservation after the Syrian war. In fact, the cadastral maps are not updated and only few detailed surveys of the residential buildings in the Old City of Aleppo are available, covering only a limited area (e.g. recent research paper on post Syrian-war housing in the Old City of Aleppo (Kousa *et al.*, 2021). These surveys should be extended to include other neighborhoods and the entire of the Old City of Aleppo.

Next to this, there is currently no inventory of the resident’s needs, apart from few examples (Kousa *et al.*, 2021; Corsten, 1995), and these needs are not taken into account in the current regulations. This lack has contributed to uncontrolled interventions on many buildings to meet the needs of privacy, new infrastructure, and services, as well as the urgent

need to repair roofs and walls damaged by the war. In order to improve regulations concerning residential heritage in the Old City of Aleppo, it is crucial to involve the local community in the decision-making process and to consider their needs in upcoming policy modifications. All relevant parties, including local communities, academic authorities, unions and the private sector, should be given the opportunity to participate.

Next to lack of information on the state of conservation of the residential heritage and the needs of the inhabitant, it emerges from the interviews that there is also a lack of background knowledge among those responsible for implementing the interventions, who may be young and inexperienced in technical, historic, and legal aspects. Knowledge support from academia and NGOs could help to provide adequate competences to the committee members, for example by means of workshops and seminars.

There is lack of knowledge also at the level of execution of the intervention. Due to the war, traditional knowledge of building material and construction techniques has been lost and the current craftsmanship is often not specialized enough to work on heritage building. New education programs would help to create specialized craftsmen. Suitable documentation of the old techniques, e.g. by involving old craftsmen, would make this knowledge available to younger people.

In addition to the legal, administrative and social issues discussed above, there are also economic challenges that make renovation difficult. The renovation costs are high and, at present, there is no economic support available. Banks refuse to give loans to residents, and it can be difficult to transfer money from other countries to Syria, so financing interventions is difficult. Possibly, the development of incentives, such as emergency funds, soft loans, legal services, tax exemptions, etc. could improve residents' ability to restore and rebuild their houses.

Concluding, this paper highlighted the main limitations of current policies. The specific needs for improvement have been addressed and some general proposals made. In future research, approaches to similar international situations will be assessed, with the aim to come to suitable and feasible suggestions guidelines for the improvement of policies for revitalizing residential heritage in the Old City of Aleppo.

#### Note

1. The neighborhood mukhtar serves as a bridging link between the neighborhood residences and public bodies including particularly the municipality.

#### References

- Aleppo City Council (1990), *Building Control System Project in the Old City of Aleppo*, Issued by Resolution No. 39 of 22.09.1990, Aleppo City Council, Aleppo.
- Aleppo City Council (2007), *Aleppo City Council, Building Control System in the Old City of Aleppo*, Issued by Resolution of 18.04.2007, Aleppo City Council, Aleppo.
- Aleppo City Council (2020), *Building Control System Project in the Old City of Aleppo*, Approved by Resolution No. 64 of 10.11.2020, Aleppo City Council, Aleppo.
- Corsten, N. (1995), *Social Survey Evaluation of the Pilot Project*. Old Aleppo Revival Project/GTZ: Aleppo.
- Fischer, M. and Gangler, A. (2012), *The Aleppo Archive: A Place for the Memory of Urban History*; Aleppo City Council/GLZ, Dt. Ges. Für Internat. Zsarb, Eschborn.
- Gaube, H. and Wirth, E. (2007), *Aleppo: Historische und geographische Beiträge zur baulichen Gestaltung, zur sozialen Organisation und zur wirtschaftlichen Dynamik einer vorderasiatischen Fernhandelsmetropole [Aleppo: Historical and geographical contributions to the structural design, s. Weisbaden, Dr Ludwig Reichert, Germany, translation to Arabic Olabi, S. Part One/Ministry of Culture - Syrian General Book Organization, Damascus, available at: [http://digilib.unila.ac.id/4949/15/BAB\\_II.pdf](http://digilib.unila.ac.id/4949/15/BAB_II.pdf)*

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- GTZ (1999), "GTZ Guideline for the Restoration and renovation of the old city of Aleppo".
- Hinz, H.M. and Richard, A. (2013), *UNESCO and ICOM Emergency Red List of Syrian Antiquities at Risk*, United Nations Educational, Scientific and Cultural Organization, Media Services, New York, NY, available at: [www.unesco.org/new/en/media-services/single-view/n](http://www.unesco.org/new/en/media-services/single-view/n)
- Jaber, S. (2013), *URBAN STREETS towards Sustainable Mobility in Arabic Cities*, Universität Stuttgart, Stuttgart.
- Khanji, R. (2017), *Integrating Urban Empty Spaces in the Urban Historical Fabric (Issue March)*, Aleppo University, Aleppo.
- Khirfan, L. (2014), *World Heritage, Urban Design and Tourism Three Cities in the Middle East*, Ashgate Publishing, Farnham.
- Knefaty, H.A. (2015), *Management Policies of Old City and Their Role in Achieving Sustainable Development a Case Study: Old City – Aleppo*, Aleppo University, Aleppo.
- Kousa, C. and Pottgiesser, U. (2019), "Post Syrian-war material recovery, reuse and transformation in the Old City of Aleppo", *Journal of Cultural Heritage Management and Sustainable Development*, Vol. 10 No. 1, doi: [10.1108/JCHMSD-07-2019-0085](https://doi.org/10.1108/JCHMSD-07-2019-0085).
- Kousa, C., Pottgiesser, U. and Lubelli, B. (2021), "Post-Syrian war residential heritage transformations in the old city of Aleppo: socio-cultural sustainability aspects", *Sustainability*, Vol. 13 No. 21, doi: [10.3390/su132112213](https://doi.org/10.3390/su132112213).
- Sarhan, O. (2014), "The role of international organizations and institutions in the process of restoring and preserving cultural heritage after the end of the armed conflict in Syria".
- Sauvaget, J. (1941), *Alep: Essai sur le développement d'une grande ville syrienne, des origines au milieu du XIXe siècle. [Aleppo: Essay on the development of a large Syrian city, from its origins to the mid-nineteenth century]*, Librairie Orientaliste Paul Geuthner, Cambridge.
- Syrian Arab Republic (1999), *The Syrian Antiquities Law, Promulgated by Legislative Decree No. 222 of 26.10.1963 with All its Amendments*, Presidency of the Syrian Arab Republic, Damascus.
- The Directorate of the Old City (2007), *Demolition and Reconstruction Permit Documents*, The Department of Permits, Single Window, Aleppo.
- UNESCO (2019), "Convention concerning the protection of the World cultural and natural heritage, state of conservation of the properties inscribed on the list of World heritage in danger", *UNITED NATIONS EDUCATIONAL, SCIENTIFIC AND CULTURAL ORGANIZATION*, Paris.
- UNESCO and UNITAR (2018), *Five Years of Conflict: The State of Cultural Heritage in the Ancient City of Aleppo; A Comprehensive Multi-Temporal Satellite Imagery-Based Damage Analysis for the Ancient City of Aleppo*, United Nations Educational, Scientific and Cultural Organization, and United Nations Institute for Training and Research, Paris.
- Windelberg, J., Kelzieh, T. and Hallaj, O.A. (2001), *Development Plan: Rehabilitation of the Old City of Aleppo*, Municipality of Aleppo/GTZ, Bonn.

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