

# Impact of Urban Planning Instruments on the Conservation of Built Heritage in Algeria. Case Study: Old City Center of Biskra

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## Abstract

The POS (land use plan) as an instrument of urban planning execution, as defined in the texts of the laws on urban planning and development in Algeria, constitute a judicious and undeniable opportunity for the various urban interventions undertaken by several city actors. Apart from the development, restructuring and renovation operations, the rehabilitation and conservation of the built heritage are also taken into account in the guidelines of these plans. The main objective of this study is to try to see, to what extent, the POS shows off the concept of heritage protection and to measure the gap between its content and its application in the field then to know the causes. To do this, the study focused on the case of the old colonial neighborhood, Biskra (city in southern Algeria) commonly called “colonial checkerboard”. This site represents the city center of the French colonial occupation after 1844. It also represents an important part of the history and the built heritage of the current city. Its precariousness and its marginalization requires a real serious care palliating its disappearance. The study is based on a typomorphological analytical approach comparing the physical state’s evolution of the buildings between the year 2000 and 2022 on the urban and architectural level. The results show the implementation tools fragility of the approved POS in the heritage conservation’s domain. Even the timid presence of orientations on heritage conservation provided for in the POS, are absent in the new constructions. Same goes for housing and equipment’s building permits.

**Key words:** Heritage, conservation, planning, city actors, urban planning instruments.

## INTRODUCTION

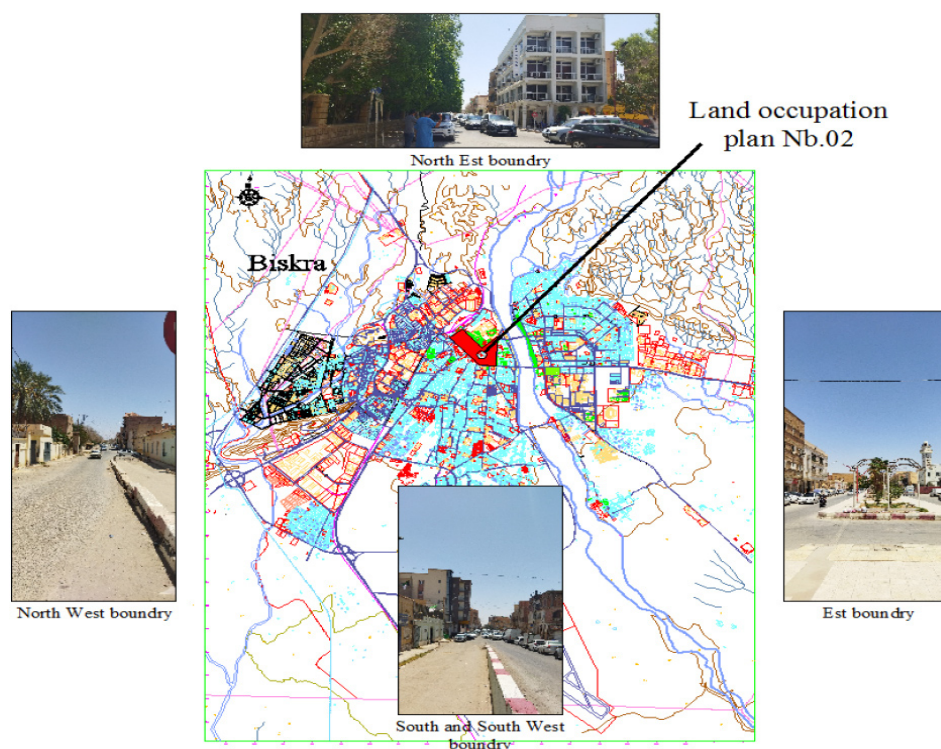
The city is the constitution of two inseparable entities: the urban space represented by the physical urban tissue and the aspect of immaterial life embodied by the civil society that inhabits it (Bernard. G 2003, p.110). The relationship that links them is multidimensional (economic, cultural, security, political, etc.). This osmosis is only achieved by a well determined technical-economic and political organization for some country context using well determined operational urbanism instruments. Currently, the development policy of cities or urban agglomerations in Algeria is based on two urban planning instruments: the PDAU (master plan for development and urban planning) and the POS (land use plan). The PDAU gives the major future’s orientations of the city on the socio-economic and cultural plans. Whereas, the POS is a plan which comes from the PDAU and executes its orientations in a part of the city (law N°90-29 and the decrees N°91-177 and N°91-178).

The POS is a plan that prepares the theoretical concepts of the reflection to the concrete realization, with the help of technical and legislative arsenal that allows it to form an execution and consequent file of details. Among these important tools: the operations of development, restructuring, renovation and conservation of heritage. To do this, the POS calls for the participation of several actors: technicians, elected, administrators and residents (Madjid Chachour, 2022). The execution of the POS in Algeria is directed by the planning operations and to a lesser degree, the restructuring. These do not encounter many constraints in the approval and implementation. On the other hand, the renovation operation causes enormous difficulties, even impossibility of realization. This is due, in general, to the difficulties of expropriation and indemnity as well as to other technical and financial problems, especially with regard to private properties (Lévesque, C., 2003). The conservation of the cultural and real estate heritage poses other more complex problems in the study and realization (Hmood K., 2019). It cannot escape the major influence of the law that governs it (Pierre-Alain Collot, 2020). This law is lacking in “technical details in particular” which are essential for a judicious realization. Changes in the regulations resulting from these laws can also weaken the implementation mechanisms. (A. Ragheb et al., 2021).

The domain of the cultural and real estate protection of heritage arouses the world interest through the means of the UNESCO by insisting on a global vision of this problem everywhere in the world (Udeaja et al., 2020, Lorusso. S., et al., 2016 and Hosagrahar, J., 2019). In Algeria, this field is still to be developed, despite the efforts made.

## CASE STUDY

Biskra is a Saharan city in southern Algeria. It is located 435 km southeast of the capital (Algiers). The master plan of development and urbanism of this city (PDAU) divides the plan of the city in several POS. The land use plan (P.O.S) is established according to the orientations of the PDAU. It aims mainly at organizing the urban tissue and defines, in a detailed and precise way, the allocation and the way of using the land in surface and volume of each sector. Our study focuses on the POS N°02 which have been approved in 2002. It represents the old neighborhood of the French colonial period. It spreads over an area of 31 Ha and is composed of private properties in its majority. It is limited from the North East by the public garden (05 July), from the South and South West, by the boulevard Emir Abdelkader, from the North West by the street Frères Menani and from the West by the railway station see (Figure 1).



**Figure 1.** Situation of the case study (source: Author, 2022)

## METHODOLOGY

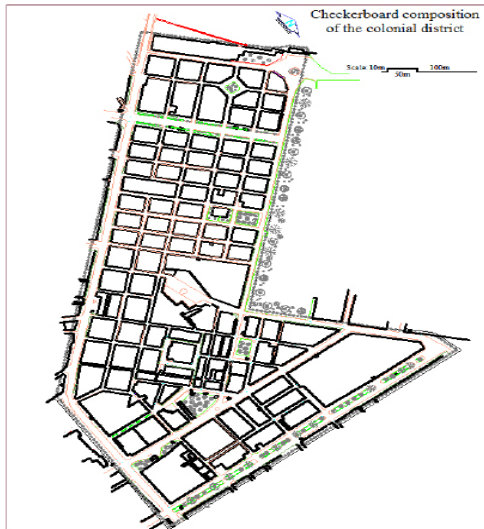
The study was carried out in two stages. The first is devoted to the review and analysis of the POS file of the Case study, followed by a fieldwork which list and classify the buildings of this part of town according to their state (bad, average, good). The second is a typo-morphological analysis (Philippe P. et al., 2002), comparing the initial state of the corpus in 2000 with that diagnosed in 2022. This approach represents, in reality, the evaluative assessment allowing, on the one hand, to see if the POS in question has a plausible approach of the built heritage preservation. On the other hand, it seeks to know to what extent the decisions of the POS implementation project are respected and concretized in reality in order to rule on the gap causes between the projected and the real.

## RESULTS AND DISCUSSION

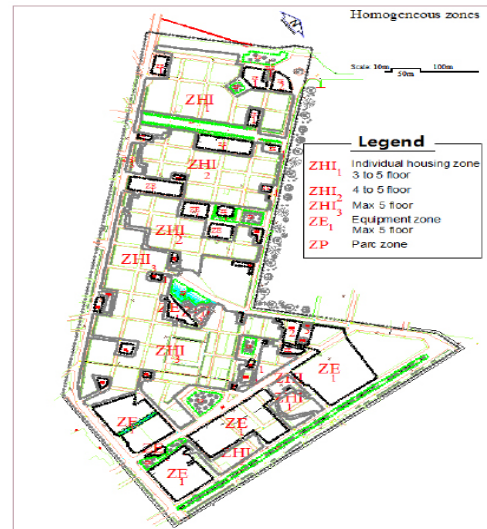
The POS (N°02) of this part of the city approved in 2002, derives from the orientation of the PDAU of 1990 dividing the urban agglomeration of Biskra into 60 POS. The restructuring is the intervention decided by this PDAU in order to apply it in this POS. It is applied only at the level of various networks. Although no allusion was made to the conservation of this old neighborhood, the central idea of the approved POS is based on the preservation of this tissue as an important built heritage. The analysis of the content of this POS has shown that this conservation is attempted on both urban and architectural scales.

## Analysis of the POS at the Urban Scale

The POS preserves entirely the urban framework inherited from the old layout of the case study. In the master plan, the checkerboard preserves its chessboard morphology (Figure 2). On the other hand, the heights of the new buildings are greater along the peripheral boulevards and in the center of the neighborhood (around the covered market) in order to make the land more profitable (Figure 3).



**Figure 2.** Morphology of the checkerboard case study  
(Source: Author, 2022)

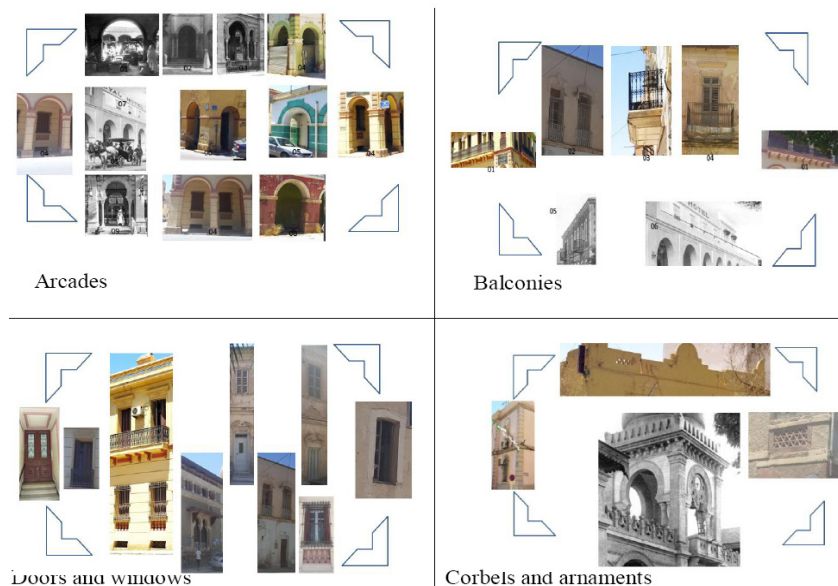


**Figure 3.** Homogeneous zone and building heights  
(Source: Author, 2022)

In 2022, we can see that the idea of maintaining the urban route had a great ease in the concretization. It is quite clear that the expropriation or compensation caused by the restructuring or renovation operations (widening of lanes or creation of diagonal breakthroughs or other bold interventions) faced with a fragility of technical and financial means cause significant difficulties in the realization.

## Analysis of the POS at the Architectural Scale

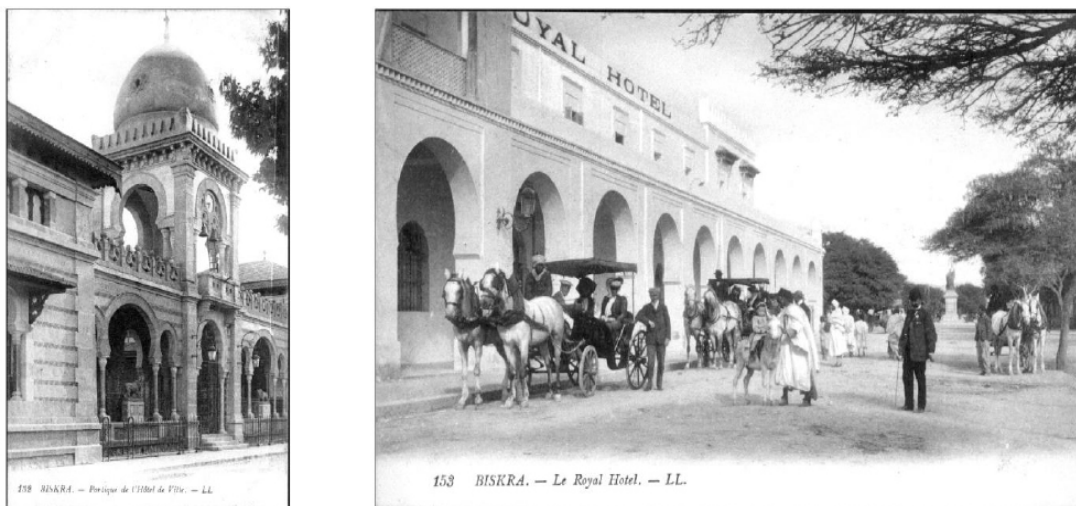
An inventory of architectural compositional elements that express the dominant colonial style in terms of facade elements and volumes has been attempted by the POS, such as: arcades, balconies, windows and doors, corbels and ornaments (Figure 4). This inventory constitutes a non-exhaustive collection of the style known at that epoch, by the "Arabisesances" (François Béguin, 1993) (mixture of European and Arab-Oriental style)



**Figure 4.** Non-exhaustive typology inventory of architectural elements contained in the old colonial neighborhood  
(Source: Author, 2022)



This inventory is based on existing heritage buildings as well as on memories engraved in the collective memory through photos of prestigious old buildings that have collapsed in the past (Figure 5). This is part of the long and arduous process that countries go through in the field of heritage conservation (Chandan S. et al., 2019).



**Figure 5.** Examples of prestigious old buildings with two heterogeneous societies. (Source: Web Site, 2022)

The existing is meant to be preserved by restoration or rehabilitation, but the memory of what has disappeared is meant to be remembered. Both need to be revalorized. In its regulations, the approved POS requires an effective introduction of these elements in the composition of facades and volumes for new building permits. It also orders a rehabilitation of the old buildings that have persisted to the effects of time (POS N° 02 approved in 2002).

### Evaluative Assessment

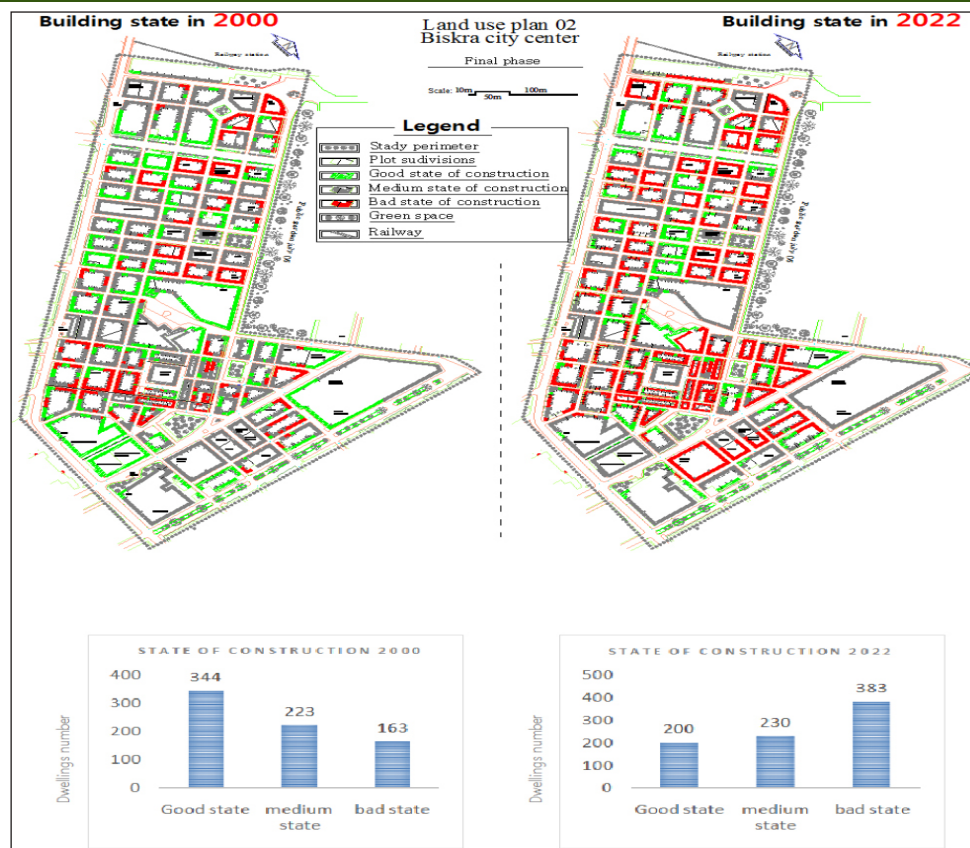
Our field survey allowed us to reclassify all the buildings in the studied area according to their state (bad, medium, good) (Figure 6). The bad state concerns the old and precarious buildings. The medium state concerns the old buildings from the colonial era that have been maintained as well as those built after independence (1970s and 1980s). Buildings in good state are those that have been recently built (for example, in the last 10 years), renovated or restored.



**Figure 6.** Buildings classification made according their state (Source: Author, 2022)

This classification forms a basis for designating and identifying the types classified in the POS of the year 2000 and the buildings state in 2022. The second analysis stage of a morphological nature compares the initial state of the corpus, as indicated in the POS, with that diagnosed in 2022 (Figure 7). This analysis has shown that the metamorphosis produced in this urban tissue has affected the physical state of the buildings, but also several other aspects. The number of plots has increased from  $(344+223+163=730)$  to  $(200+230+383=830)$ . This variation is mainly due to problems related to the legal status of the inheritance of the initial (private) plots, later divided into several others.

The variation of the physical state of the buildings is due to this new fragmentation but also to the ageing of the buildings which have gone, by the effect of time, and deterioration (Mourad B. et al., 2022), from a good or medium state in 2000 to a precarious state, even object to be demolished in 2022. The lack of maintenance has accelerated this transformation. Figure 8 shows the contribution that restoration operations have made to the longevity and maintenance of the building.



**Figure 7.** Comparison of construction status between the year 2000 and 2022. (Source: Author, 2022)



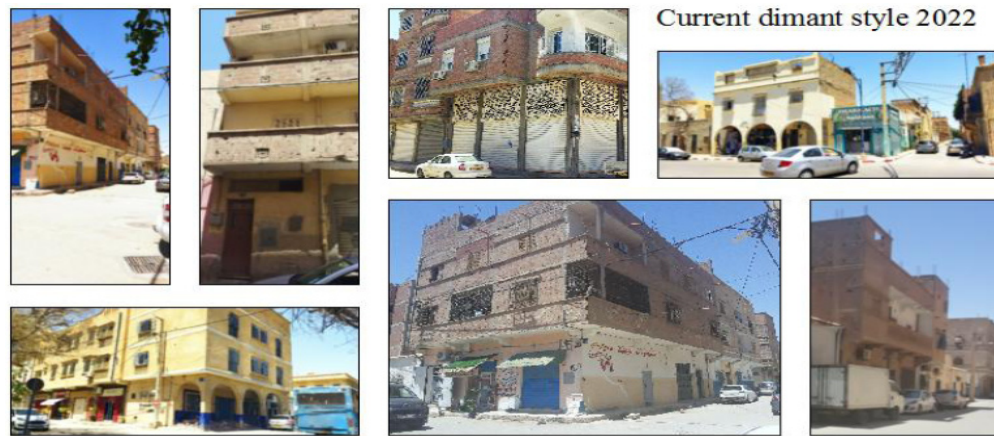
**Figure 8.** Rare examples of restoration in the Old Colonial neighborhood. (Source: Author, 2022)

In the field, after the approval of this POS in 2002 and the cadastral regularization of the land, this part of town has witnessed a strong activity of request for demolition and construction permits and then, of course, the realization of a significant number of housing and equipment. What attracts the first attention, is the invasion of this old neighborhood by the typology most widely spread in the other districts of the city.

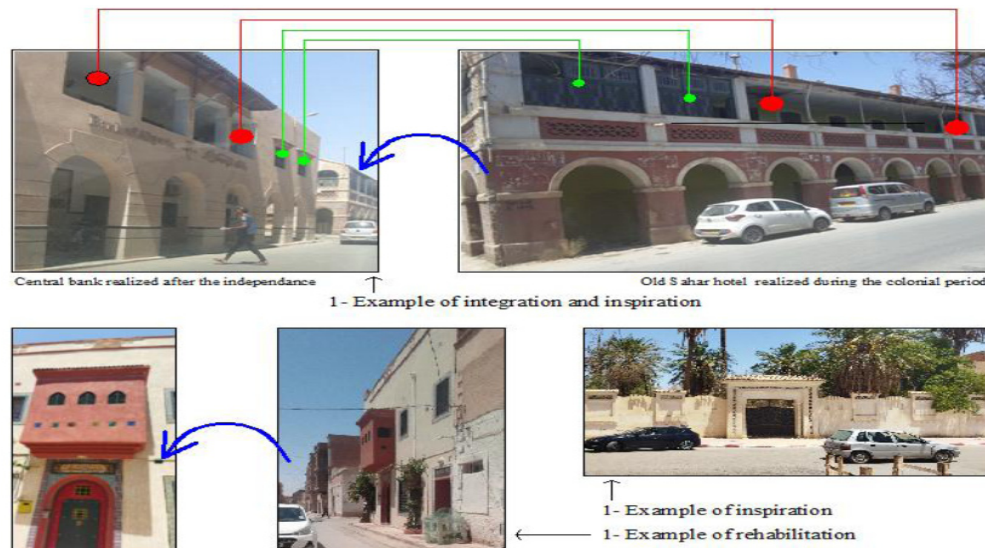
This typology is characterized by a superstructure in reinforced concrete post and beam system. The ground floor is generally occupied by garages or commercial premises. The balconies run along the entire width of the facades. In many other cases, the intermediate floors are moved forward by one meter on the street in order to increase the surface area on the upper floors. Openings in the form of doors or windows all barred without any previous order or style. No concern is given to decorative or ornamental details that could give character to the facade elements (Figure 9).

This propagation has accelerated the disappearance of the old colonial style that we consider as a heritage that must be protected. Very rare are the cases of buildings where we see the presence of interest towards this valorizing inspiration is noted. They are currently in number of 03 (figure 10).



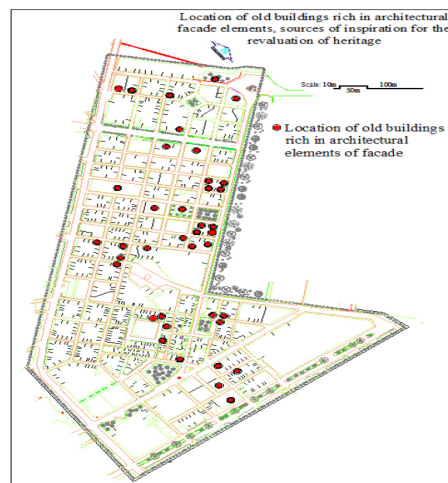


**Figure 9.** Actuel dominante facade architectural typologie . (Source: auteur 2022)



**Figure 10.** Rare examples of building heritage enhancement at the façade level. (Source: Author, 2022)

This state of affairs clearly shows us that there is a very important gap between what the POS projects and what is realized on the reality. Apart from the number of levels which is respected, almost all the buildings built after 2002 have no relation with the old neighborhood architecture. The sources of inspiration are thus becoming increasingly rare with the incessant demolition of the old colonial buildings and thus narrowing the opportunities for rehabilitation or inspiration (Figure 11).



**Figure 11.** Location of remaining heritage buildings (Source: Author 2022)

These new buildings have building permits that are devoid of POS guidelines in relation to facades. The question is then posed to the control of these permits that should, in principle, guarantee the application of what is agreed in the POS. It is posed more seriously after the year 2008 (year of the announcement of the law 15/08 on the regularization and compliance of property). This shows, on the one hand, the fragility of the mechanisms and details of the applicability of the laws on the cultural and built heritage conservation. On the other hand, it also shows the experimental poverty that is known by the professional environment in the sector of the built heritage preservation (architects, craftsmen restorers, archaeologists, etc.). Added to this, the lack of effectiveness and clarity of what the POS in question provided in these guidelines in relation to the heritage conservation on both levels: study and realization.

## **CONCLUSION**

This study has discussed the problem of the built heritage conservation using a comparative and evaluative method. It evaluates the application of the colonial neighborhood POS N° 02 of Biskra between 2000 and 2022. It shows the almost total non-compliance of new constructions with the directives and regulations referring to the architectural level. No reference is made to the panoply of facade components inherited from old buildings. With the aim of better management of the national built heritage preservation, four major orientations can be issued from this study:

- Reinforcement of the laws relating to conservation in the applicability of the PDAU and POS, on the technical, financial level and especially details of execution specific to the Algerian context;
- Reinforcement of technical actors on a professional level through special technical and legal development training;
- Creation of autonomous agencies administratively and financially specialized in the realization of the restoration and rehabilitation operations of the equipments and the public monuments. These agencies have the right to inspect and control the execution of the POS, especially those concerning the cultural and real estate heritage conservation;
- Encouragement of the inhabitants participation by the state financial and technical help in the realization or the rehabilitation of their facades in order to develop the preservation or revalorization domain of certain desired patrimonial styles.

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