

Policies and Processes for Accessibility from a UD Perspective: The Integrated Approach Supported by the Friuli Venezia Giulia Region (IT)

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Abstract. With Regional Law no. 10 of 19 March 2018 (General principles and implementing provisions on accessibility), the Autonomous Region of Friuli Venezia Giulia has set itself the objective of improving urban accessibility throughout the regional territory, in order to guarantee equal conditions for everyone to enjoy open spaces and the built environment. The improvement of accessibility is conceived as a long-term objective, to be implemented in stages, according to an incremental development project model. Still today, when work is carried out to eliminate architectural barriers, designers adopt an approach that looks at the "barrier/disability" binomial, identifying "dedicated" solutions and tackling the problem of accessibility in relation to specific targets of users whose ability to access and use spaces and environments is assessed in relation to the capability of a person generically defined as "normally able". In contrast, in a barrier-free approach, designers are called upon to adopt a broader perspective, to look at the variety of people who make up a real community (extended user base), and to consider different physical conditions, ages, abilities and capacities (motor, sensory and cognitive), from the early stages of the project. In order to promote change and to impart this change of approach, the Autonomous Region of Friuli Venezia Giulia has envisaged integrated actions, aimed, as a whole, at accompanying the process that guides the project culture towards a progressive adherence to the methodological criteria of Universal Design, introducing, at the same time, support measures aimed at financing the Municipalities of the Region both for the preparation of barrier elimination plans (PEBAs) and the implementation of the interventions identified in those plans. Among the envisaged actions, the most important is a general accessibility mapping, which includes the adoption of a terminology system (accessibility ontology) integrated in a specific computer application, through which the municipalities will be able to detect architectural barriers, in a homogeneous way, over the entire regional territory.

Keywords: Accessibility, Governance, Inclusive design tools

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1. Introduction

Improving the accessibility of our cities and towns is not just a matter of enforcing regulations, but above all a social achievement: the tangible exercise of those citizenship rights that fulfil the constitutional principles of equality, shared dignity, and inclusion, so often proclaimed on paper, and ignored in practice. Regulatory frameworks are important but, by themselves, not sufficient to obtain widespread positive results; as is often the case (see the Italian example of the Plans for the Elimination of Architectural Barriers), the obligation does not lead to the desired change. Each law must be supported, promoting an effective change in the dominant culture through coherent actions, directed, as a whole, to the achievement of a single, far-reaching objective represented, in this case, by a new culture of planning.

2. Shared governance

The implementation of Regional Law R.L. 10/2018 is based on a programme of well-defined actions and the deployment of significant resources to support them, but it also passes through structured relationships and a constant exchange of shared information between all those involved. For this reason, the Region has decided, from the beginning, to lead the governance of accessibility, employing the expertise and professionalism of subjects able to support every aspect of the planned programme, such as: the Regional Information Centre on Architectural Barriers and Accessibility, the University of Trieste, and the University of Udine. These entities represent a virtuous example of inter-institutional collaboration, providing an interdisciplinary approach, which in itself expresses added value, also thanks to the fact that they belong to networks of reference, in their respective disciplines, at the regional, national, and international levels.

3. The “central regional accessibility reference centre” function

The Region has, among other things, established a central regional reference centre for accessibility with Regional Law 10/18 (art. 5), entrusting its management to the Regional Council of Associations of People with Disabilities and their Families in Friuli Venezia Giulia. The Council fulfils this function through its own specialised office named *Centro Regionale d'Informazione su Barriere architettoniche e Accessibilità* (CRIBA FVG). It provides free advice on architectural barriers and accessibility to all subjects, both public and private, who request it. For many years CRIBA has been a regional the main source of information on the subject. By assigning to the Council the function of a central regional reference centre for accessibility (Regional Law 10/18 art. 5), the Region has therefore guaranteed itself a unique capital of professional skills and experience. The subjects that benefit directly or indirectly from the activities of the office are many: in the last five years alone, the CRIBA has carried out an average - on average by default - of 526 consultations per year. In the current year, the CRIBA has become the main subject upon which the general accessibility mapping project of the Region is based, as well as the core of its action in the field of accessibility *governance*.

4. The Region's measures

Regional Law 10/2018 (General principles and implementing provisions for accessibility²), issued by the Autonomous Region of Friuli Venezia Giulia promotes the adoption of Universal Design, as a quality standard for building and urban development design: the basis of this methodology is the assumption of a perspective that focuses on the requirements of use for a wider range of people, starting from the initial stages of the project. Improving accessibility to guarantee equal conditions for the widest number of citizens to fully enjoy the urban environment where they live is a question of civility and responsibility, over and above the quality of the project. In a field in which "dedicated" solutions have always been designed, looking at the reductive and limiting binomial barrier/disability, action must be taken on several fronts to achieve the desired change in the planning culture. The macro-objective of improving the accessibility of open space and the built environment throughout the Region is necessarily a long-term objective, to be pursued in successive phases, according to a project model of incremental development. To achieve such a complex objective, the Region has identified several complementary and integrated measures. The heart of the law is the general accessibility mapping project, which also includes the preparation phase of the Plans for the Elimination of Architectural Barriers (*Piani di Eliminazione delle Barriere Architettoniche* - PEBA).

4.1. The general accessibility mapping project

Article 6 of Regional Law 10/18 states: "*The general mapping project is a long-term macro-objective which accompanies the process of improving accessibility throughout the Region; in order to implement it, the Region has adopted an in-progress orientation, according to an incremental development project model...*". The general accessibility mapping project - the only one of its kind in Italy - represents the Region's most important initiative in the field of accessibility. Through the construction and adoption of a unified ontology of accessibility - the subject of a research project involving the Universities of Trieste and Udine - and by providing the municipalities with a specifically developed application, the aim is to achieve the adoption of a standardised practice for the detection of architectural barriers and critical issues³ throughout the Region. The collected data will be made available to a central regional accessibility database, which will be made available to all interested stakeholders. The availability of quality data is a key factor in any decision-making process, as it enables meaningful analysis that is likely to lead to better choices. The single accessibility database will be a real Regional asset available to the Region, the municipalities, and any other interested party, which will be appropriately authorised (e.g., construction, tourism, cultural enterprises). The availability of data will also allow an ex-post analysis of public sector policies and related services. It will also constitute the basis for the construction of an accessibility

² www.Regione.fvg.it >la Regione >LEGGI, BUR, DELIBERE, DECRETI >Leggi regionali
<https://lexview-int.regione.fvg.it/FontiNormative/xml/index.aspx>

³ Critical issues include not only the presence of architectural barriers, as defined by Italian Ministerial Decree 236/89, but also the incorrect implementation of structures, the spatial discontinuity of projects, the absence of usable paths and route connections and, in general, the absence of solutions aimed at making the environment usable for everyone autonomously and safely according to the criteria of Universal Design.

classification system aimed, in the long term, at the creation of an application that will allow citizens/users/tourists to query the system from their smartphones, through the geo-referencing of points of interest and to obtain synthetic information on accessible routes to reach them mentioned.

4.1.1. The application for detecting critical issues and overcoming the concept of architectural barriers

Through the use of an application developed for this purpose⁴, the operators (municipal technicians and professionals) will be able to perform a survey following the specific methodology integrated into the system. The survey activity will also allow queries to be made and data to be exported to external GIS⁵ systems, thus supplying a single regional database on accessibility-related issues. In addition, a function will be developed to allow the insertion, recall, and management of a list of "standard solutions" to accessibility problems, orienting technicians and professionals towards solutions that meet the criteria of Universal Design - without, however, binding them to preconceived solutions - and to determine the relative hypothetical cost.

To date, the application has reached an advanced stage of development. As far as the functionalities pertaining to the survey are concerned, the internal test (executed by the parties involved in the governance of accessibility) has already been completed, and it is about to be tested on the territory of the municipalities that have offered their collaboration (seven pilot municipalities). The testing of the application will be implemented between May and July 2022 in order to proceed with its subsequent release to all regional municipalities as of January 2023.

4.1.2. The ontology of accessibility

The decision to have an "ontology of accessibility" stemmed from the observation that the language used to identify the objects of our particular domain of knowledge was not uniform. In the field of spatial information, in the sphere of urban heritage, these objects belong to different disciplines and fields of application, which implies that conceptually identical objects may be defined in different ways, or that classes of objects may include some and exclude others, depending on the field under consideration. National normative texts, international standards, and research documents on accessibility also present an important variety in the technical vocabulary used to describe components, elements, and attributes of the built environment. Hence the necessity, before proceeding with the development of the application, to acquire a specific ontology, suited to our purposes, in order to conceptually identify, define and describe the classes of objects, the objects, their connections, and requirements in an unambiguous manner, without doubts, with the aim of providing the various parties involved with an unequivocal understanding of the meanings of the reference domain, overcoming the differences in terminology that pertain to the various disciplines involved in the transversal subject of accessibility.

The ontological tree integrated into the application is the result of a research project conducted by the University of Trieste and the University of Udine, with the collaboration of the Region and CRIBA. To create a suitable system to manage the complexity of the different situations, a thorough examination of the existing legislation

⁴ The development of the application was entrusted to Insiel SpA, an Inhouse company of the Region.

⁵ Geographic Information System.

on accessibility (mainly Italian Ministerial Decree 236/89 and Italian Presidential Decree 503/96) was conducted, identifying the different urban contexts and their subdivisions, analysing, in parallel, the terms most used in the different sector frameworks, including: architecture, construction, urban planning, and environment. Where the term belonged specifically to the field of accessibility, it was preferred over others; whereas, on the other hand, depending on the sector, it was possible to find more than one definition for the same object, the most appropriate and functional one for our specific needs was chosen.

4.1.3. The Elimination of Architectural Barriers Plans (Piani di Eliminazione delle Barriere Architettoniche - PEBA) as a stage of mapping

PEBAs were introduced into Italian law in 1986, with regard to existing public buildings (not yet adapted to the requirements of Presidential Decree 384/1978, now repealed). Subsequently, in 1992, their scope was extended to urban areas. Even though the national law introduced an obligation and provided for a sanctioning measure (the appointment of a commissioner appointed by the Regions in the event of non-compliance), this obligation has been largely disregarded for decades, as has the sanctioning procedure (there have been very few cases of commissioners being appointed). It is also for this reason that the Region of Friuli Venezia Giulia, from the outset, has made a precise choice of field, deciding to support and not sanction non-compliant municipalities. At the same time, through the provision of appropriate tools and measures, it has contributed to the relaunch of PEBAs (integrating national law without overlapping it), but, in line with a broader vision of accessibility, it has brought these tools within the broader scope of the mapping project. Accordingly, the preparation of Plans for the Elimination of Architectural Barriers becomes a phase of the project (art. 2, paragraph 1, letter k) ter) Regional Law 10/18). This was taken into account in the development of the application (point 4.1.1), which, in fact, allows the execution of the survey phases in accordance with the method outlined in the Guidelines (4.2.1) and allows obtaining reports that are part of the documentation of which a PEBA is composed.

4.2. Tools of support and assistance

In order to influence and modify the planning culture and promote change, it is essential to modify the environment in which we work, make it accessible, to prepare it to receive the seeds of the change we wish to promote. This is a cultural challenge, even more than a project-based one, which can be achieved in successive steps and with the aid of suitable tools. In this sense, on June 30, 2020, the Region adopted the Methodological Guidelines for the preparation of PEBAs⁶, which have been widely distributed to all the municipalities in the Region, and launched two funding streams: the first to support the costs for the preparation of PEBAs, the second for the design and implementation of the projects identified in the PEBAs themselves.

⁶ www.regione.fvg.it > aree tematiche > lavori pubblici, edilizia > edilizia > contributi ai Comuni per la predisposizione dei PEBA > Piani di Eliminazione delle Barriere Architettoniche

4.2.1. Methodological guidelines for the preparation of PEBA's

Since 1986, the national legislator has introduced the obligation for the relevant authorities "to adopt a PEBA", but at the same time has never provided instructions for its drafting. Based on this observation, it was understood that this absence of instructions could be the real reason for non-compliance. A law, even the best one, will not have the desired impact if the cultural environment in which it is intended to have an effect is unprepared for it. From this standpoint, the forecasting of an instrument such as a PEBA was destined to remain unfulfilled in the absence of training, and therefore specific preparation of technicians and professionals on accessibility issues. The Region has, therefore, taken steps to adopt and provide municipalities with methodological guidelines to accompany the process of preparation of PEBA's. The Guidelines - the result of the work of the entire working group involved in governance - are structured in such a way as to identify a set of activities grouped by the consistency of content and timing. These activities, taken as a whole, indicate a general and quality pathway which, however, each municipality is called upon to apply in relation to the specificities of its territorial context: in this sense, the Guidelines offer effective support to the municipality in planning interventions conceived "tailor-made" to the contexts and their actual and specific requirements. The aim is also to prevent municipalities from adopting measures for the elimination of architectural barriers that do not involve participation, planning, and coordination. The precise methodology set out in the Guidelines represents a sort of "toolbox" for internal and external planners, useful for developing the PEBA as a strategic plan to coordinate and systemise the various interventions foreseen in the territory, strengthening the municipality's action also in collaboration with other external parties participating in the project.

4.2.2. Funding

In order to relaunch PEBA's and encourage the process that has been initiated, in addition to the essential operational tool represented by the methodological guidelines, the Region has also introduced two funding measures: contributions for the preparation of PEBA's (art. 8 bis), and funding for the design and implementation of projects to overcome and remove architectural barriers (art. 8). The first is a contribution to partially cover the costs incurred for the preparation of a PEBA, such as the fee due to the third parties (professionals, professional firms, etc.) for the partial or total execution of the activity (study, technical, etc.) related to the preparation of a PEBA, the costs incurred and documented to carry out initiatives/events related to the phase of participation of citizens and stakeholders. The contribution is proportional to the number of inhabitants of the municipality and cannot exceed fifty per cent of the total expense. The second type of funding relates to the co-participation in the expenses incurred for interventions that must have been identified in the PEBA, the adoption of which, therefore, also, in this case, becomes an essential condition for access to the grant.

4.3. Promotion and dissemination of the Universal Design methodology

The Region promotes and supports initiatives to raise awareness and training on accessibility issues, also with the collaboration of other entities. In particular, it is considered that training for professionals and municipal technicians is of paramount importance to implement a real change, towards a gradual adoption of the methodological criteria of Universal Design, so that they become, to all intents and

purposes, an integral part of the skills of the planner and, in general, of all "insiders". Contextually to the release of the application, foreseen for January 2023, a cycle of training initiatives will be launched, aimed at both municipal technicians and professionals (surveyors, architects, engineers, and others), as well as a series of start-up days for the use of the new application.

4.3.1. *The FVG Accessibile Portal*

The *FVG Accessibile* portal (currently under construction), will host all the information related to the world of accessibility, acting as a "showcase" of the territory on the subject. A space will be dedicated to the municipalities that can directly contribute to it, in order to inform citizens of their achievements in the area of accessibility (contributions requested, interventions implemented, spaces and buildings rendered accessible, etc.)

5. Building an Accessibility Network

The general accessibility mapping project is directed at all subjects, both public and private, however, from the outset, the focus has been on the municipalities of the Region chosen in the Regional Law as privileged stakeholders for developing and consolidating the general accessibility mapping project. Until recently, despite the obligation imposed by national legislation (an imposition that was introduced in 1986 and concerns all public administrations), the municipalities that had a PEBA in Friuli Venezia Giulia were less than twenty, out of a total of two hundred and fifteen. Since the adoption of the Guidelines and the introduction of the support measure for the preparation of the PEBA (2020), to date, more than eighty Municipalities have applied for a contribution; more than one-third of the Municipalities in the Region, therefore, have already adopted or are in the process of developing a PEBA, demonstrating, from the outset, great interest in the Region's proposals and the measures that have been introduced. With the collaboration of the municipalities, the Region has therefore laid the foundations for the growth and consolidation of knowledge and skills inspired by the criteria of Universal Design, in a virtuous circle, inaugurating a new season, a paradigm shift in building and urban design and, consequently, in the approach towards inclusion. No longer an inclusion that considers the needs of some as the object of services confined to specific spaces and dedicated services, but as the concrete implementation of the principle of equality and equal dignity that is also achieved through the transformation of the urban space, into a place enjoyed by all: a site designed with a view to a 'real' community of people, each with varying capacities and abilities, to allow everyone to use the environment safely and autonomously they live in.

6. Future development

Once field testing, verification, and validation of the application's dedicated survey functionalities have been completed, the development of additional functionalities will be implemented, in particular, the one related to the "Solution Library": the surveyor/planner, by querying the system through the new functionality provided on the application, will be able to obtain suggestions, i.e., design schemes and examples of interventions (*best practices*) aimed at providing the most suitable solution for any

architectural barriers and criticalities that have been detected, without, however, becoming restricted to the proposed solutions. Based on a new agreement with Universities - which is being defined - further research will be conducted to examine and extrapolate the best solution proposals that have already been adopted in contexts similar to those analysed, to meet the space and environment utilisation requirements of the most fragile users ⁷, with the awareness that where a solution satisfies the needs of the weakest beneficiary it also fulfils the requirements for autonomous usability of the majority of people. The release of the application to municipalities, including all the integrated features, is scheduled for January 2023.

Thanks to the aforementioned agreement, an Observatory will also be established to analyse and monitor the quality of Architectural Barrier Removal Plans. The research and study activity includes a thorough benchmarking analysis of PEBA's that have been adopted and are in the process of implementation, leading to the construction of a structured method of verifying their compliance with the recommendations contained in the Region's Guidelines, in adherence to the principles of Universal Design: the activity is directed to highlight and identify the qualifying aspects and elements considered essential for a quality PEBA, according to the interventions for the elimination of architectural barriers/criticalities identified in them. Furthermore, a link to the regional price list is also provided with cost items related to individual activities/work, as well as "packages" of activities/work (regarding works for which it is more economical to solve more critical issues with a single overall intervention).

Also planned for the end of the year is the activation of the FVG ACCESSIBILE portal (under construction), which will host all information related to the world of accessibility, acting as a "showcase" of the regional territory on the subject. A space dedicated to municipalities is planned, allowing them to provide their own pages to inform citizens of what has been achieved on their territory in terms of accessibility (such as requested funding, interventions in progress, building routes rendered accessible...) By the end of 2024, an additional research activity focusing on the conceptual development of an accessibility classification system, diversified according to the user requirements of the weakest individuals, is planned (please refer to footnote 6). The system is expected to provide a conceptual framework conducive to the subsequent development of an application aimed at providing the end user - who will be able to query the application system via georeferencing - with concise information on the level of accessibility of public places of interest in the form of simplified graphical and/or textual displays.

In the 2022-2024 three-year period, extensive emphasis will also be placed on informative and educational activities concerning the methodological principles of Universal Design through the organization of initiatives and events aimed, in particular, at municipal technicians and professionals to support the complete development of the project and the actions undertaken by the Region.

⁷ UN Convention on the Rights of Persons with Disabilities, Article 1 comma 2.