3.1.2. Interviews with associations

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Analysis of the state of the art on accessibility

Report

WP3 – Improving of the accessibility of the Italian-Croatian UNESCO sites

Act. 3.1 – Development of guidelines for a management plan model for a better accessibility of UNESCO sites

Fondazione Aquileia

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Introduction

The study aimed at the improvement of the usability of the cultural heritage of Aquileia arises from the conviction that architecture is a living subject, born to be used and the historical heritage to be planned, whether constructive or decorative, even in its smallest dimension of an archeological find, it is a subject that should be communicated to be known and handed down to future generations.

As Gadamar claimed “culture is the only good that, when distributed, acquires more value”. In order to distribute culture in an efficient way, as every human being has different needs, in the planning of events, a vast range of public should be taken into consideration. This way of thinking that pursues the concepts of universal design, is valid, both for the new interventions and for maintenance work.

In order to render the heritage accessible to as many different types of public as possible, one may turn to coordinated pluri-sensorial actions, that permit more users to become interested and, at the same time, enrich the general cultural experience with obvious economical and social consequences.

The concept of accessibility, when it comes to heritage, often clashes with the necessity of the conservation of the Asset. To improve the understanding and permit the user to enjoy the Asset, it is necessary to avoid alterations that may damage the inherent sense of the Asset itself. However, this does not prevent the research of solutions that permit the reconnection of today’s city to its history through a new controlled planning.

The usability of the Asset is founded on aspects that regard the physical, sensorial and cognitive spheres. The services that can correspond to the users’ needs must permit an effective comprehension and communication precisely because, if particular conditions don’t permit physical accessibility to the Asset, then it is opportune to consider alternative solutions to consent its cognition just the same. Lack of communication or inefficiency of the same are the main elements that separate the potential user from the places of cultural interest.

Quoting Amedeo Bellini: “We have a lot of difficulties, insurmountable difficulties, to imagine a monument that hasn’t been made for Man, that is conserved and protected for itself as an abstraction and not for usability […]. An Asset is not an Asset if it isn’t available, mere contemplation does not belong to architecture”[1]. Man and heritage must have a practical relationship and so, inserting the Asset into a vital cycle of the place to which it belongs, is a required procedure, necessary for the sake of the Asset itself.

1 A. Bellini, “Pure Contemplation doesn’t Belong to Architecture”, Theme,1.p2-3, 1998.

Methodology

The study has pursued the target to investigate on what the needs of the public are, above all of those with specific requirements [2], concerning the close and delicate relation between accessibility and the cultural heritage, in order to be able to benefit from the concrete indications for the improvement of the usage of the heritage of Aquileia and launch arguments on various scales. For this purpose some interviews were made involving associations active in the sphere of disability, operating on the territory of the Region Friuli Venezia Giulia, and eminent institutional figures who contributed to define a bird's eye view of the necessities, of the studies made and of the orientations on the accessibility of the heritage.

The involved associations and their respective interlocutors were: A.I.A.S. (Italian Association for assistance to Spastics) Trieste Onlus with President Claudia Zacchigna, A.N.F.F.A.S. (National Association of Families with Intellective and/or Relational disabilities), Onlus Udine with President Cristina Schiratti, A.N.I.O.M.A.P. (National Association Instructors Orientation of Mobility) with the counsellor Corrado Bortolin, E.N.S. (National Institution for he Deaf) Onlus with the the President of the Regional Council of Friuli Venezia Giulia Francesca Lisjak,Tetra-Paraplegic Association of Friuli Venezia Giulia Onlus with Alessia Modestini and Walter Toffoli, U.I.C.I. (Italian Union of Blind and Myopic People) with the President of the Regional Council and of the Regional Institute Rittmeyer for the blind Hubert Perfler, U.I.L.D.M. (Italian Union for Battle against Muscular Distrophy) Oonlus with President Daniela Campigotto. The institutions, the offices and the eminent people who took part can be listed in this way: Regione Friuli Venezia Giulia with the Central Director for Culture and Sport Dr. Antonella Manca and the Regional Board of the associations of the disabled and their families of F.V.G. Onlus with President Dr. Mario Brancati, University of Trieste with the Director of the Department of Engineering and Architecture prof. arch. Ilaria Garofalo, University of Studi of Udine with prof. Arch. Cristina Conti, Civic Museums of Udine, partner of COME-IN! project, with the Responsible for the Architectural Museum Dr. Paola Visentini, C.R.I.B.A. FVG (Regional Centre of Information on Architectural Barriers of Friuli venezia Giulia with the technicians arch Paola Pascoli and Dr. Michele Franz, PromoTurismo FVG with the Resposible for accessible tourism Product Dr. Alessia Del Bianco Rizzardo.

The interviews were based on the will to acquire a practical knowledge of the elements useful to the beneficiary to make a visit, as autonomous as possible, in all its phases and aspects.

The visit to a place of cultural interest can have two phases: one of preparation, that generally starts at a distance, and one of exploration, that takes place in loco and is composed and

2 Gian Maria Greco defines "public with specific needs" all those people towards whom specific solutions must be found and realised to be able to guarantee the accessibility of cultural products, places and services. G.M. Greco, "Cultural accessibility as an instrument for everybody's rights", the cultural heritage to all, availibility, brand awareness, Quaderni della volorizzaizone – NS4, p.100, 2017.

influenced by various aspects. The first one is a physically passive one, when the user can obtain formation on the context of the visit and its contents. On the contrary, the second one is physically active, during which the visitor confronts himself with the context, the room that surrounds him, with which he has to obtain familiarity to be able to move and later to create a relationship with the contents, the Assets that are part of it and are exposed in it. Mobility and knowledge are therefore bound together and they are both influenced by the services and the planning attention that may facilitate or contrast them.

In the regional sphere, the attention points at accessibility of the heritage, main object of the project USEFALL – UNESCO Site Experience For ALL in the field of the programme of cross-border cooperation INTERREG V-A Italy-Croatia 2014-2020 of which, this report is an integrated and substantial part, has been previously analysed, with specific attention to museums, by another European project. The COME IN! Project of INTERREG Central Europe has pursued the aim to evaluate and promote the European artistic heritage rendering easier the accessibility to small and medium museums to a more extended public. The guide lines developed from it and the application experience of the Archeological Museum of Udine have established a fundamental contribution for the analysis and to the operative suggestions reported in the following chapters. In the light of the needs and of the examples of *good practice* expressed by the speakers, analyses in sito have been done to verify the state ofthe art on the inclusion of people with motoric, psychic, sensorial and intellective disabilities, in the fruition of some areas of the cultural heritage of Aquileia. The investigated areas are: Basilica, Baptistery and Südhalle, Domus and Bishop'sl Palace, Fondo Cal, Fondo Cossar, Fondo Pasqualis, Roman Forum, River Port and Via Sacra, Necropolis, National Archeological Museum, Early Christian Museum, Infopoint of PromoTurismoFVG. The investigation has been made through an analytical study of the areas, both on the spot and on the web, measurements to the tool, photographic documentation and data collection in monitoring profiles o verify the coditions of accessibility, elaborated on the basis of the check-lists proposed by the *Linee Guida per il superamento delle barriere architettoniche nei luoghi di interesse culturale* and of Attachment 4 to *Linee guida per la redazione del Piano di eliminazione delle barriere architettoniche (P.E.B.A.) nei musei, complessi monumentali, aree e parchi archeologici* of the Ministery for Cultural Goods and Activities and by the analysis cards produced by Associazione Tetra – Paraplegici F.V.G. O.n.l.u.s. for the web site www.turismoaccessibile.fvg.it.

The interviews: phases of the visit and needs of the visitors

As it has been hinted at before, the interviews were intended to study the needs of the visitors, trying to get a bird's eye view as ample as possible.

Starting from the presupposition that every individual person is unique and consequently with unique and personal needs, in order to help him/her, every different solution that each visitor might choose, should be taken into consideration. It must be indicated that a perfect planning ability for each person is an exclusive priority of every private environment. A place that is open to the public, can and must simplify the approach and the fruition by various types of public, but there must necessarily be a degree of adjustment on their part. This should be even more so in places with a strong historical cultural value, where the relationship between the accessibility to the heritage is subordinated to the verification of the safeguard conditions.

Preparation

The preparation for a visit of a place of cultural interest is the same for every user. It demands a clear definition of the places to visit, that have to be evaluated on the characteristics of physical, communicative and service accessibility. While planning the material useful to tourists, it would be wise to consider that the disabled visitors need more detailed information with regards to the context and not exclusively to the contents.

The preparation for the visit and the collection of functional information regarding its course can be acquired directly (telephone or video call) or indirectly (e-mail or chat) from the operators on the territory, or else autonomously on web platorms.

As indicated also in the Newsletter n. 26 of the Ministery for Cultural Goods and Activities, *Guiding lines on the editing of the Plan to eliminate archituctural barriers (P.E.B.A.) in museums, monumental complexes, archeological areas and parks,* a document useful to the presentation of the place and to the programming of the visit by the user can be the Service Card (Carta dei Servizi). A document that should be published on the web platform of the place to be visited, that presents the characteristics of the site, services that it proposes, existing criticalities, prohibitions (bans) and

possibilities, in a clear, objective and transparent way. The fundamental concept is that the information given must be precise and updated[3] to permit the user to understand whether the place corresponds to his/her own personal needs, in order to enjoy its beauty to the full.

The web site should be a digital space of intuitive surfing that accompanies the user in getting to know the place, in the acquisition of important information and it should guarantee the maximum fruition and use to the public. The information given should be of interest to everybody, starting with general informaton relative to: position, how to reach it, position of the the parking site, presence of a parking place for the disabled, opening and closing hours, fees, discounts, ways to book the

3 It might be useful to insert the data of the last updating in the information given.

services and then give detailed data relative to mobility, and lanes, revealing the presence of differences in levels, solutions to eliminate them, the material the lanes are made of[4] and their length, the slope of the ramps, the presence of stairs, the measurements of the lifts[5], the position of accessible toilets and their measurements, the necessity or not of a helper, availble services, etc, that is, all the information that describes the place in its morpholgy and the services it offers.

In order to render more understandable the contents it could be useful to add some pictures with describing captions to render them understandable even to the web site visitors with eye-sight deficiency who use software screen readers[6].

In order to obtain a good organisation of a visit, it is important to give the information relative to the time, space and itineraries necessary, both to get to and to explore the place of interest.

As the knowledge of the space helps to understand the exhibit, in case of persons with eye-sight deficit, a complication arises, because the user can concentrate his energy either on the comprehension of the place or on the comprehension of the exhibits, as both activities involve a strong expenditure of energy. Therefore, the importance of pre-knowledge of the place through accessible contents on the web is comprehensible, to make the exploration of the exhibits more enjoyable[7].

The necessary information to put on the web is similar to that to be presented in loco, however it may be useful to supply the possibility of printing the web contents in the form of a pdf file.

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4 Communicating the existing type of paving is useful as, if the paving is not perfectly homogeneous, it will be perceived in a different way on the basis of the individual tolerance of each person.

5 Some users may have also the necessity to know the technical dimensional aspects, as, according to the mobility assistance that they use, they may need different space allowance for movement.

6 If the website is planned according to the guiding lines to the accessibility and the graphic design and the structure respect the decrees of L.n.4/2004, Dispositions to favour the access to disabled subjects to the information tools, and the indications of the World Wide Web Consortium, even persons with eye-sight disability will be able to access to the contents using the assisting technologies most suitable for them. Among the products that are mostly used, there are the magnifying software, Screen magnifier and the Screen Reader.

7 The University of Udine has carried out some experiments regarding the National Archeological Museum of Aquileia detecting and realising a textual translation of the space, not of the works, with the aim to improve the visits of people with eye-sight deficit. In fact, blind people would have the necessity to visit the sites more than once: the first time to get a perception of the space, the second time to have the experience of an accompanied visit, the third time to enjoy the visit autonomously. The experiment was intended to elaborate a tool useful to this need. The result was a text in a pdf format, that can be listened to as an audio file, that shows the museum with descriptions of level disparities, the material that the pavings are made of, indications on mobile elements, that could be hindering or dangerous and perceivable architectural elements. The research gives value to the text as it can be easily transformed into an audio file and be functional for various visitors. As the representative prof. Arch. Christina Conti sustains: “The frenzy of today’s routine leads to an aptitude to listening rather than to watching”.

To offer the possibility to access to the contents, these should be communicated in a simple language, in different languages, forecasting more details or other types of explanation, such as videos in the sign language[8] (LIS/ASL/IS), videos with captions, elaborated texts in a simplified language style, according to the guiding lines of *easy to read,* or CAA (Alternative Augmentative Communication). The simplified language style expects the production of simple but efficient contents, that can be used by persons suffering from autism and cognitive disability, by children, by foreigners with an elementary knowledge of the language, but also by elders thanks to the use of larger characters and pictures. The pamphlets and other paper products can be integrated by audio elements with the introduction of qr-code.

Notwithstanding the fact that at this point, technology is an integrated part of our daily routine, and it is in continuous evolution, the operators of the territory observe that contact with the interlocutor is still strongly valued. This may be justified by the fact that up to now, only few structures propose a detailed Service Card on their web platforms and/or by the fact that the requirements of the people are so personal that the contact with an interlocutor transmits a major certainty of the veracity of the information. For this reason the training of the operators must be retained fundamental as they must be able to have the competence to establish a correct relationship with the user, and in this specific case, they must know how to give appropriate and complete information based on what the individual person asks for. In fact, the operator is the first person that the visitor meets. In order to give a satisfying service that is ever more compliant with the requests of the user, the recording of *feedback* or the application of the control modality of the chanels and contents used by the visitors could be relevant. While it could be relatively simple to organize an analysis on the number of users who benefit from the contact with the operators, through calls or e-mails, it might be complicated to monitor the accessibility to the web sites and understand the effective use of the information contained, such as the utility of the Service Card. For this purpose it would be necessary to adopt specific tools to intercept the way the web sites are used, the influx of the surfing and the origin of the users.

Mobility

Mobility is an aspect with an ample variety of scale regarding the visit in its entirety, from the beginning to the end, from the moment the users take a vehicle that will take them to the site of the visit until it takes them back home. It is an aspect strongly bound to the territory, to the infrastructures, and to city planning, and also to the architectural planning and the decor elements. When planning the location, the type of public that will visit must be kept in mind, as also in what

8 The sign language can be divided in: LIS - Italian Language of Signs, ASL -American Sign Language, IS - International Sign Language.

way the public will enter, move inside and what can be perceived as a physical or sensorial barrier[9].

Aquileia and its cultural heritage currently receive a tourism that is mainly “private” or “organized”, following the limited oportunity of public transport connections. In the case of people with eye-sight disability, the problem of the need of a helper arises immediately.

As those who arrive at Aquileia, mainly arrive using their own means of transport, it is important to consider the position of the parking area. In fact, the user with physical disabilities, needs to be taken by car, as near as possible to the entrance of the site to be visited. Because of this, in the proximity of the places of cultural interest, there should be stalls that are correctly signalled dedicated to people with disability, to facilitate those who move autonomously, or, if this isn’t possible, as an alternative, there should be stalls for a temporary stop, to be used in the case of accompanied disabled persons.

Usability of the itineraries

With regards to mobility, the first thing to be taken into consideration is obviously the necessity to guarantee the usability of the lanes. These should be free of obstacles from a morphological and practical points of view. Their dimension should guarantee ample space for manoeuvre considering different necessities, even based on motoric spasms, prolongations and missed control of the limbs are very frequent in some people with disability, that make them increase, even if temporarily, their encumbrance volume. In the case of lanes with unresolved or unsolvable complexities it would be advantageous to consider the possibility to prearrange an alternative, accessible itinerary without lengthening it considerably or a call service to guarantee a conditioned accessibility. In case of accessibility by means of an alternative itinerary, this should be accurately considered avoiding it to be perceived as a “service entrance”. The material that constitutes the lane must be chosen, keeping in mind the place where it is going to be (internal, external) and its use[10]. The pavings should be steady, homogeneous and coplanar, avoiding disparities that could create a stumbling block, interrupt or generate excesive requests of wheelchairs or other wheeled means. In the case of historical pavings to be preserved, the introduction of walkable aisles placed at wheelbase congruous with the use of wheelchairs.

Also the decor elements like benches, seats, baskets, information panels, etc, must be placed in a discreet way in order not to create obstacles or danger.

The morphology of the itinerary includes also elements at different levels that must be overcome, among which, first of all, the ramps, which should be realized calculating perfect links between the

9 An inclusive planning should understand, primarily how the space is perceived by the visitor and what may represent a barrier. Noise, invasive arboreal elements, unsteady ground, lack of perception of depth, etc., may represent a barrier.

10 An itinerary, containing a cycling lane, can’t be made of material that renders its crossing difficult.

heights, avoiding steps, even the slightest, and forecasting very reduced slopes within the limits of the regulations to guarantee to pass on safely and autonomously. On the basis of the length of the ramp, the presence of side kerbs that are useful to avoid careening phenomena must be kept in mind.

The stairs should have easily detectable non-slip tape in a contrasting colour, especially in descent. Ramps and stairs might need sustaining railings, according to their length, and useful directional indications by means of tactile muffs.

When possible, lifts and elevators, must be big enough to contain wheelchairs, pushchairs and respective helpers and they should have push buttons, possibly horizontal, with indication texts in relief and in braille, including the destination of the floor and a sound signal at arrival.

The visitors with an eye-sight disability manage to go for a distance of about eight metres, keeping a rectilinear pace. This fact helps to understand that, especially in external areas, the itineraries should be planned, inserting guiding elements, such as tactilo-plantar or natural guides, to direct the visitor along the lane, but above all, to act as a protection against dangerous conditions.

In order to facilitate a safe and autonomous mobility, the structures may supply some courtesy aids to the visitor that lack useful elements to undertake the visit of the area. Some examples may be: the wheelchair for the elders, the medical walker, the courtesy pushchair for children, the baby-carrier backpacks, and the courtesy white technological for people with eye-sight disability to carry out specific itineraries. Along outside itineraries, where a strong naturalistic type of ground could prevent the visit to those who move on wheeled aids, the possibility to supply Triride may facilitate mobility. Obviously, the priority to work on the itineraries and their usability rather than on aids is still valid.

In very large areas and with organized itineraries, the use of club cars and the use of bicycles combined with tandem bikes, could be taken into consideration (appreciated by the blind and by people with intellective disability) or combined with child seats.

Orientation

Besides the point of view of the itineraries, one of the fundamental elements that permit the user to move autonomously is orientation, that is put into effect through the information given by the operators on the territory and the fixed and portable material that supports it. A clear informative equipment is essential to permit anybody to move autonomously and to identify rapidly the elements of interest.

Along the itinerary, legible, clearly visible and comprehensible directional and identification signage could be placed. This can’t be used with excessive redundancy, because it would provoke a sense of confusion, instead, it must be placed at srategical points. The use of pictograms in substitution to written multilingual texts, permits the adoption of elements that are universally known, eliminating the language barriers. These indications are valid for all textual information.

Fixed and portable maps, that perform the function of a constant reference point, constitute the main tool that permits the users to orient themselves and to understand the develop of the itinerary. Data that prove functional concern the length of time needed, the distance compared to other points of interest (given that it answers the question: where am I and how long is there still to arrive at…?) the complexity of the itinerary and the services offered, whether it regards the external or the internal environment. So, simple maps of the itinerary, even downloadable from the web site or acquired in loco, are a basic element to an autonomous visit. To these maps, one can add technological tools, such as: audio guides, or apps to download on a personal device of the user, (smartphone or a tablet), that, if they contain orientative information, they can be a valid support, particularly to the visitors with eye-sight deficit. Giving the visitors the possibility to use their own devices permits to facilitate the use of the tool which, notwithstanding a *friendly* structure, could be complex.

Parallel to what has been indicated above, a strong acknowledgement is due to human resources that permit a safe and personalized mobility, based on the real needs of the individual visitor, differently from the apps that can represent the expression of a theoretical mobility. The company of a trained guide, able to hold a conversation with a deaf or intellectually disabled visitor, or to accompany a visitor with eye-sight disability or on a wheelchair, constitutes a reassurance that permits the user to estrange himself from the perturbations of mobility in a strange environment and to concentrate on the primary object of the visit, that is: the gratification of the relationship between the person and the heritage. This can be acquired, by creating a familiarity of the visited site, that generally isn't a known environment, and that can be obtained with a good preparation able to create the best context for the public. It is always true that some people with a disability need direct contact with the helper and so, especially in the case of a guided group visit, it is often necessary to add a personal support to the visitor besides the trained guide.

The facility

The pleasantness of the visit and the usage of the space, besides being influenced by the basic characters described above, is also influenced by the presence of supplementary services that satisfy the paramount necessities. Those retained fundamental are undoubtedly accessible toilets, seats and drinking fountains at double heights or water dispensers[11], both for internal and external use.

Toilets are logically an element of primary necessity whose number and location must be considered according to the extension of the area to be visited and to the itineraries. For their planning an approach "at a family standard", that is forecasting them larger to guarantee the

11 It is interesting to note the non-usability, for some visitors, of plastic cups that are too deformable in contrast with those in recyclable paper. This factor latches on and is also in favour of the necessary Plastic Free process to eliminate the use of disposable plastic elements.

mobility of visitors on wheelchairs, but also inserting a toilet bowl for children, besides hooks at different heights. It is obvious that, if the place needs more toilets, most likely, it won't always be possible to have them. However, it is important to have toilets slightly larger than the minimum standards to allow people on mechanical moving aids to use them comfortably. The doors must be recognisable and they must open towards the outside of the toilet and they must have emergency locks. The necessity to supply the toilets with a changing table for changing babies' nappies, has long been taken into consideration, but it hasn't always been applied. In a less important measure, there is the necessity of a changing space, adjacent to the toilet, for adults, naturally in case of disabled visitors. To this purpose a useful service, but still exceptionally used, is the predisposition of a changing room equipped with a small bed where to lie down and possibly a sink.

The second element is the presence of seats, In a place of cultural interest, therefore a place full of incentives, it is fundamental for the vsitors to be able to rest a while both physically and mentally. The seats that can be of different types and materials should be placed in various points of the itinerary, contemplating the possible influx of visitors to calculate the number needed. In the case of very vast external areas, that are usually visited during favourable climatic periods, a relevant aspect is the presence of shady resting places. However, a shady place cannot always be found, for different variable factors, such as the Earth's rotation, or uncotrollable, like the maintenance of the trees. To solve this problem one can use courtesy beach umbrellas that can be found, even on payment, from the tourist infomation offices or from te ticket offices of the individual sites.

Instead, in internal spaces rich of incentives, these could arouse in the user the necessity of a momentary mental rest. A simple seat facing the exterior, or the organisation of quiet spaces, void of incentives, where a person can find a state of tranquillity, can be a solution. These spaces don't have to be big and they don't need specific aids, except for a sofa or any other comfortable seat and they can be used also by children and people with intellectual disabilities or autistism spectrum, to find calmness. in moments of anxiety or crisis.

Inside the exhibiting rooms, especially in the case of multi-sensorial itineraries, it could be interesting to evaluate the predisposition of supporting surfaces or hooks to free the users temporarily of potential bags or other objects, thus permitting them to interact with the aids of the museum (tablet, tactile elements, etc.)

Other aspects that can be highlighted are connected to security and fuctionality. In the very vast areas, that are controlled in rotation by the supervision staff, the visitor might experience a sense of abandonment especially in the time of need. Taking into consideration the insertion of tools that supply an assistance service to protect the users might be positive (for example, the insertion of a phone number for emergencies on printable information supports and on the panels on site). Once again the need of the training of the personelle on the comprehension of the difficulties that the various disabiliities might meet becomes a priority.

The courtesy solutions for the improvement of mobility mentioned in the specific paragraph, come under the services sphere. In case the hiring of a wheelchair is taken into consideration, this can be combined with a helper, useful both to elderly people and to obese visitors to contain the time to cover the distance.

Finally, connected to functionality, when it comes to open air sites, like the archeological areas, it could be intersting to evaluate the presence of a single equipped reception point, located near the starting point of the itineraries, in which the groups can organise themselves and through the help of multi-sensorial and multi-medial tools prepare for the visit of the sites or carry out an alternative itinerary in case of impraticability of the external sites.

Critical state

In order to offer the individual users a safe mobility and facilitate the usability of the places, attention must be payed to the factors that can compromise, the visit or its pleasantness. These factors are generally attributable to a combination of shortcomings, redundancies, or to what does not belong to a normal sequence of facts and they can concern both the aspect of mobility on the place and the knowledge of the heritage and of the exposed elements.

Sensations of anxiety and insecurity may originate in any person with a strong subjective character and may also be connected to sensations of oppression and to a difficulty to correlate with the environment. These sensations can spring from too dark places or from excessively bright incentives, or from a wrong measurement based on the flow of the visit, or the lack of perception of depth or from too loud and unexpected noises. Even multi-medial elements and much more the exhibitions that use multimedia and technology, today more and more commonly in use, as a means of comprehension and interpretation to involve the user, may generate perturbations. These are amplified in case of disability, where the person, obviously on the basis of the level and type of disability, must be well prepared in advance to relate to particular conditions.

The element that most people can associate with a criticality is disorientation, due to lack of information and to museum set-ups that prefer the scenic aspect, cancelling the useful reference points. It isn't certain that the visitors are used to relate with archeological areas or museums and certainly theycan't know the details of the structure that they intend to visit, usually for the first and maybe the only time. Consequently, it is obvious that when a person approaches an absolutely new place, unless in possession of useful information on how to move inside it, experiences a sense of annoyance or frustration. The direction and orientation information on the itinerary is therefore fundamental, as it is fundamental to supply a reference contact or the presence of a person on the spot to ask for information or assistance, in case of necessity.

The elements indicated above mustn't be considered absolutely inapplicable because critical for some people, as for others they may be indifferent, normal or even pleasant. The sensitivity of those who plan the information on the visit or that of the guides who accompany the visitors must

manifest itself in the information possessed by the users who, conscious of the presence of particular elements or conditions may prepare themselves or choose autonomously to abandon some parts of the itinerary.

Knowledge

In the contest of the visit, the knowledge of the place and of the elements that are exposed in it is transmitted through the usability *of the descriptive information and the usability of the Asset,* where the concept of Asset identifies both the place of cultural interest and the work or the find that is part of the heritage. In order to permit the public to access to the contents, it is necessary to create, in the same itinerary, an integrated system of multi-sensorial tools and aids, opportunely signalled with pictograms that involve different senses, boosting the quality of the experience of an autonomous visit. These elements contribute to realize the basis of an autonomous knowledge, that further on can be enriched by the contribution given by the trained personelle. However, human contribution always remains primary since, as Dr. Paola Visentini affirms " a welcoming visit is determined by the welcoming personelle, a culturally rich visit is given by an operator didactically informed on the scientific and human levels".

In the planning of the itineraries of the visit, the aim to pursue is the visitor's freedom. The users should be free to choose which tools or aids to use to carry out the visit, among those that are mostly congenial to them, according to their condition,competence, personal style and will. The abilities of a person are in fact so subjective that only the person involved can choose whether to carry out a type of itinerary rather than another.

In the case of an approach to a "for All" visit, the informative, descriptive material and the tools of the knowledge of the Asset, can't have a unitary character. To guarantee the *fruibility of the contents* fixed informative panels should be predisposed, and as an integration, portable printable material elaborated in various languages and levels of analysis, according to an accurate graphic study and textual contents, as well as technological elements or interactions. Aiming at a multi-sensorial approach, the advertising posters and the portable paper material should have connections with web, apps, technological devices with GPS or Qr-code contributions, in order to give the possibility to read the contents of the poster itself in various ways: from the enlarged character to the video in the language of signs and /or with captions, as well as the integration with other contents.

The information panels should be formulated in an accessible language, neither specifically technical nor excessively simplified. To study these better, considering the involvement of various types of public, the information products, should be available in different languages, in braille and evaluated with various levels of analysis to choose: from the CAA - Alternative Augmentative Communication, to the simplified language according to the approach *easy to read* up to a more technical analysis.

To facilitate the comprehension of the text contents it suitable to use easy reading font like Arial, Verdana, Tahoma, enlarged characters, good line-spacing, a correct chromatic contrast and luminance between the text and the background, adequate illumination, using opaque material in order to avoid reflections that can blur the reading of the contents. The supports in loco should be placed and studied in a way to be accessible and well visible. For example, an excessive vertical development could render difficult the reading of the information, that is why it is necessary to consider the number of panels, the size of the characters so that they can be read also by people on a wheelchair or those who are't very tall. The average height of the panels should be between 140 to 170 cms from the ground, because it must respect the average height of the human eye that for a standing adult is equal to 160cms, while for a person on a wheelchair, it is 125 cms. As indicated above, to know an element it is necessary to be able to benefit from the information that describes it, but it is still more necessary to be able to benefit from the Asset itself. Inside the itineraries of the visit, in order to permit a wider range of public or establish a relationship with the Good, various types of aids can be introduced to support and substitute a direct relationship: 3d tactile reconstructions, tactile maps, virtual reconstructions, videos, audios.

Tactile maps and tactile 3d reproductions, besides being facilitating elements for the knowledge of the heritage, they are attractive elements with a playful character with a strong general acknowledgement. If a person has intellective will and expressive abilities to acquire new knowledge, he/she can easily enjoy a cultural visit, instead, if the person doesn't possess these abilities, the visit becomes uselasss and the participation complex. So, it is necessarty to use attractive elements. Creating "mini attractions" can be functional in involving everybody, but particularly the people with an intellectual deficit or children, for whom the reproduction, that they can handle liberally, acts as an element of interest and as an incentive. Obviously, to be able to understand what the reconstruction refers to, it has to be accompanied by a caption in text and in braille[12].

12 Braille is a writing code invented by Louis Braille in 1829. There are two types of braille: the traditional braille used for printing and the informative code information technology code used for technical applications and for the braille displays to connect to the computer. As reported by Corrado Bortolin, instructor A.N.I.O.M.A.P., in light of the research on eye-sight disability carried out in the Region Friuli Venezia Giulia, that is a mirror of the national and international reality, the population with eye-sight disability is becoming older and older. A drastic decrease of eye-sight disability at a neonatal level and an equally consistent increase of the same in adults is recorded. Consequently the practical use of braille is highly reduced because people start having eye-sight problems when they are adults and they have never had the opportunity to learn how to use it. It is calculated that only 0.4 to 0.5 % of the blind people have competence in the use of this reading system. Braille maintains its characteristic of a great means of social communication, in any case, it must be kept in mind that only few people benefit from it and that these same people use also other technologies that outdo it in reaching communicative and cognitive aims of accessible information.

The 3D models can be realized using different techniques and with a scale of different detail on the basis of the target, set during the planning, that the precise model must have, that is: what it must transmit. In fact, the aim could be the simple comprehension of constituent volumes, or the exact legibility of decorative elements or even the development of stimuli and suggestions that permit the user to understand the particular characteristics of the represented[13] element. For the reproduction of a monument architectural models or volumetrics in scale, tactile maps or low reliefs of the facades are generally used; instead tridimensional objects can be reproduced with copies full size or in scale, while figurative elements such as mosaics or paintings are transmitted by low relief, reproductions, relief drawings or relief schematic images.

As a general note on doing the evaluation of the real functionality of the reconstructions for people with eye-sight deficiency, it is necessary to consider their limit of tactile perception. In the perception of detail, the tactile limit is not the same as the visual one. In fact, the detail is leggible when there is a good definition of the relief and when the distance between two points doesn't go below the distance present between the two points of the braille signs[14]. If the distance between two elements of the relief goes below this limit, the touch reads the element as one whole thing.

The video-tactile maps are universally useful to understand the space that must be represented in a simplified way, with coded symbols and explicit alphanumeric references in the relative legenda. These, like the braille plates, must be supplied with a specific support that possiibly puts them in an inclined position to facilitate the tactile reading. The relief maps should be placed on specific bookstands inclined at an angle of 30° as compared to the horizontal surface, whose lower borders are put at a minimum height of 95 cms from the ground and anyway, not above 11 cms as this would exclude from its use the visitors on wheelchairs. Having to consider also the needs of visitors with eye-sight disabilities, the maps should have the necessary chromatic contrast, luminance, dimensions and types of characters better perceivable, both to touch and to the limited residual sight. It is a good norm to insert indications with texts in enlarged character, in relief, chromatic contrast and in braille so that both visitors who know braille and those who don't will be able to consult them.

The realization of *virtual reconstructions* is posed for the use in non-accessible spaces, but also for the expanded comprehension of an element, broadly speaking, if it is planned with a didactic character. An example of this are the virtual historical reconstructions that if they include audio

13 If the tactile representation reproduces accurately a very rich decoration composed of very close elements or partially overlapping each other, the reading of the same can be very long, complex and probably not efficient. Surely it will be able to highlight the character of the richness of the decoration.

14 The braille point has a particular form and dimension, to meet the perceptive possibilities of the fingertip. Its semispherical form is 0.5 mm high with a diameter of about 1mm at the base. The empty space between 2 points that are part of the same sign is about 2 to 2.5 mm, while between two points of different letters the distance is about 3.5mm.

contents, they should be supplied with captions or descriptions in sign language that can translate them. The use of *virtual reconstructions* may take place through various supporting aids:

- video posts or an interactive table that should be studied with the purpose of a wider utility to permit their use to any type of user;
- portable devices;
- screens;
- viewers, that are adapted for the user who wears it like a mask. It must be remembered that the viewers, to date, are still not ergonomically evolved to such a level as to be considered comfortable and that the producers (Samsung,Google, Sony, HTC) agree that such technology isn't adequate for the use of small children, sometimes imposing age limits. Such tools aim at involving the users so that they can identify themselves with a different reality. When the experience is particularly immersive, and if the person can perceive visually, the only thing to do is prepare the user emotionally to the perception of a different ype of space and different visit experience. Those who are excluded from the use of this type of tools are the visitors with eye-sight disability who can be given a very detailed audio description.

On the physically visitable sites, systems of autoconsultation of the works or the elements can be predisposed, introducing *descriptive audio systems* that permit the user to benefit from the site in complete autonomy. These can be based on the use of the human voice (text read by a programme of vocal synthesis) and they can be put into effect in the traditional audio-guide, as an app or any other technological solution that leads the visitors and introduce them to the knowledge of the space and its contents. The automized audio-guides, that are close to points of interest, act upon the corresponding audio file and are ideal as they eliminate the technological management, that can be complex at times.

In the case of exposing the works, a functional organization is a means to get to know the Asset[15]. The itineraries should proceed in a logical and sequential way, rendering the passage organic and immediately recognisable. Inside the rooms, the disposition of the works should evaluate the functionality both of the fruition (that therefore consents the approach of the user), and of the security of the exhibits and of the public. It is comprehensible that the decor and setting up elements are strictly connected to the knowledge of the exposed objects.The display cases and the supports of the works should permit the visual and/or tactile fruition of the safeguarded objects and of the accompanying captions. The position of the exposed elements should be evaluated in order to avoid phenomena that could penalize the fruition of the Asset (dazzle, glare, shading,

15 In the current practice of preparation, the attitude to care for the aesthetic point of view prevails on that of the reading and comprehension needs of the visitor, what's more, it is less inclined to let its plan be influenced by the thought of guaranteeing accessibility and utility of the works to the people with eye-sight disabilities. G. Pescolderung, "Design of communication and right to public culture" published "Museums and overcoming perceptive barriers". The case of the Gallerie dell'Accademia in Venice, p.23, 2010.

darkness, etc), which must be optimally perceptible, even thanks to an appropriate chromatic and bright contrast, etc.), between the object exposed and its background.

As already indicated, for the information and the knowledge of the Asset, it is imperative to have trained guides who have the competence to transmit clear and functional concepts to the users with whom they come in contact. Their training must derive from the instructive itineraries realized in synergy with the territorial associations representing the interests of the disabled, who know their individual needs well. Considering the place of the visit and the typology of the users, the trained operators can plan the itineraries and establish the most suitable aids to use (technological supports with head phones, amplifying tools, space organisation of the group, etc.).

COME-IN! project and the applicable case of the Archeological Museum of Udine

COME-IN! is a project financed by the programme Interreg Central Europe in which thirteen partners, belonging to different countries: Poland, Germany, Austria, Croatia, Slovenia and Italy, are participating. These have worked hard to identify and define the transnational standards on the subject of accessibility. For Italy, the promoter has been the Archeological Museum of the Civic Museums of Udine.

The project has pursued the aim to evaluate the cultural heritage, strengthening the capacity of the small and medium museums, moving the attention from the exhibited object to the user by developing the users' autonomy, rendering the museums accessible also to the disabled.

The initiative involved different entities: associations, accademics, training institutes and political deciders in order to draft some guidelines useful to the reorganization accessible to collections and exhibitions and to produce a training manual for museum operators. Final target was to realize a label applicableto the structures that introduced the standards of accessibility established by the project. The guidelines, reachable on the web site of the Region Friuli Venezia Giulia at the following link: https://www.regione.fvg.it/rafvg/cms/RAFVG/cultura-sport/progetti-bandi-europei/FOGLIA5/ or on the web site www.interreg-central.eu/Content.Node/COME-IN, aim at highlighting the levels and the modalities of accessibility to material and immaterial Assets. As the concept of accessibility is very vast and involves different settings that cannot always be defined as accessible, in reality, it is accessible for everybody.

The edited guidelines provide a list of requisites and analyse punctually the moments that characterise the visit. Consequently, they communicate the methodological principles useful to the planning of museums and expository environments that can be defined accessible.

As Dr. Antonella Manca, Central Director for Culture and Sport of the Region Friuli Venezia Giulia sustains, the peculiarity of the project COME-IN! is the elaboration of a matrix developed together with the operators and the directors of museums so that it could be easily put to practice. The guidelines supply the diagnosis of what can be useful to every single museum to reach full accessibility, analyzing aspects that cover the arrival, the entrance in the museum, the cash register, the wardrobe, the exhibitory area, the infrastructural part of the toilets, etc. This, together with the training course and the handbook for the museum operators, can be adopted by any museum that wants to make interventions to improve the usability of the heritage. Given the congruity of the analyzed aspects, the matrix could be considered valid and extended to places of cultural interest.

The Archeological Museum of Udine, applying the guidelines and the principles developed for the COME-IN! Project is an applicable example of the transformation that wanted to search for in multi-sensoriality and in accessible communication, means to open to the users and accomodate the needs of the visitors with physical, perceptive, sensorial and cognitive disabilities.

To strengthen the appealing capacity of the structure, and try to obstruct the concept that disabled people think that the museum is a luxury and a place not suitable for them, the project worked on the concepts of familiarity and autonomy. Inside the museum environment, as in any other space that is not a part of a person's daily life, it is understandable that the visitor experiences a sense of confusion due to the lack of knowledge of the place. A prior element, especially for people with disability, is, therefore, the communication of real, updated information, preparatory to the visit. The pre-visit in fact, is indicated as a fundamental moment that can be divided into two phases:

1) preparatory phase previous to the access to the museum area;

2) preparatoty phase previous to the beginning of the visit at the museum.

The Archeological Museum of Udine has provided for the reorganisation of interventions starting from these two phases. For the first phase, the Internet web site was integrated with the Service Card, (on a general menu, and therefore easily accessible and downloadable even in pdf format) in which all the services offered by the museum and the useful technical data are described. In order to render more immediate the reading and facilitate the understanding of the topic described, the use of pictograms has been included in it.

The inserted data have the function to render the person aware of what the structure offers and the way the data is inserted aims at rendering it understandable to as wide a range of public as possible. For this reason, the contents are presented in text, films in Italian or in English according to choice with subtitles in a simplified language style and LIS. For the second phase, at the entrance hall of the museum, it is possible to consult an introductive video in LIS, therefore, accessible to deaf people and at the ticket office, there is a bilingual Orientation Card in English and Italian that accompanies, with a simplified description, the maps of various floors, whose rooms are presented in different colours and where the services present are signalled.

To guarantee the highest level of autonomy, according to Dr. Paola Visentini, Responsible of the Archeological Museum, the place has been completed with marks and visio-tactile information , regarding even the most elementary aspects such as the position of the umbrella stand, to make the visitors feel at ease and not compelled to ask for indications. In fact, not everybody has a natural feel for asking questions.

The mobility inside the museum is oriented by tools chosen by the users:

- paper guide (simplified, multilingual, with synthetical description of the rooms).
- classical audio-guide;
- app, marked also on the website of the museum, by means of which an audio file can be reached (relevant for visitors with eye-sight deficit as they contain orientative indications) and videos.

The floors are connected by means of a historical staircase and a lift, adapted through the insertion of buttons at a height accessible to people on a wheelchair, and with indications of the topics on each floor. Corresponding to the exit from the lift, the entrance to the exhibit hall is indicated and

there is also a viseo-tactile relief map that identifies the position of the user and introduces the next rooms to be visited.

The museum is provided with various aids to get to know it. Pamphlets have been prepared in various languages, in a simplified style, with braille code and for children and in every room there are tablets with films available in different languages, LIS and simplified contents to allow the users to choose the best tool for their own needs. These aim at providing, to as many visitors as possible, the chance to carry out an autonomous visit according to their own personal necessities, desires and curiosity. Besides, olfactory placements, 3d reconstructions of statues and other elements have been collocated along the itinerary, available for an active exploration of the museum. During the visit of the museum the users are accompanied by pictograms that supply them with information, useful to the creation of a correct relationship with the exhibits, as is the case of tactile reproductions that are marked with a pictogram in the shape of an open hand.

The display boards have been realised in such a way as to act as exhibitors and as guiding elements. These, together with the decors have been studied and corrected considering the use of a vast number of users. Their frames in corian, that distinguish them, don't act only as an element of recognition that permits the approach of people on wheelchairs, but they hold also writings in relief and in braille code and simplified 3d reproductions of some works conserved there. Therefore, they have a real function. The presence of relief writings is functional to visitors who don't have a typhlological history and who acquired eye-sight deficit in adult age, while the braille code is useful to those who are born blind or with eye-sight deficit.

The Archeological Museum of Udine wanted to work hard on an itinerary of personelle training, considered the "plus" of the structure, that involved all the operators who deal with te public, and on a unique visiting itinerary, enriched by different aids and tools to involve and move its various public, both in the guided visits and in the autonomous ones. Besides the standard visiting itinerary, it has also organised laboratories dedicated to the sensiblisation, principally addressed to schools and calibrated laboratories according to the needs of single persons.

Aquileia and its sites: state of the art and inclusion of the public

Here is a report on the state of the art, on the inclusion of people with motoric, psychic, sensorial and intellectual disabilities with some considerations for the improvement of the fruition of the cultural heritage of Aquileia. Analyses and evaluations have been elaborated on the basis of the indications given in the COME-IN! GUIDELINES, Guidelines edited by theCOME-IN! project, in the guidelines for the editing of the Plan of the elimination of the architectural barriers in museums, in museum complexes, archeological zones and parks and in the Guidelines for the overcoming of the architectural barriers in places of cultural interest of the Ministery for Culture and cultural activities.

The sites subject to investigation will be presented in individual sheets (cards in the following order.

-Infopoint PromoTurismoFVG
- Basilica
- Baptistery and Südhalle
- Domus and Bishop's Palace
- Fondo Cal
- Fondo Cossar
- Fondo Pasqualis
- Roman Forum
- River Port and Sacred Way
- Necropolis
- National Archeological Museum
- Early Christian Museum

INFOPOINT PROMOTURISMO FVG

Fig.1 Offices of Infopoint of FVG of Aquileia.

The Infopoint of PromoTourismoFVG of Aquileia is located at 11 Via Julia Augusta, within a private building.

The website, in Italian, English and German, gives all the main information regarding the tourist offer of Aquileia, completing the contents with a section dedicated to “An accessible region” whose visibility could be carried out and underlined with references in the pages concerning each individual town or city.

The building that houses Infopoint overlooks the main road that crosses Aquileia,on which there are various entries to the office:

- main entrance, that gives immediate access to the information office. It overlooks Via Julia Augusta and is separated from the public pavement by a 4 cm high stone doorstep. It can be identified by its 200 cm wide gate and by a covered recess area, delimited by 150x395 cm. glass walls. The single-shutter swing doors, opened by handle, that are placed on the short sides of the entrance zone, don't have any doorsteps and have a 90 cm span of doorway;
- secondary entrance by means of a pedestrian gate that gives access to the office zone, connected by internal paths to the infopoint area opened to the public: the private entry space is

separated from the public pavement by a 135 cm pedestrian gate. And has a 9 to 12 cm high doorstep. Opposite the 118 cm span entrance doorway with a 4cm-high stone doorstep, there is a widening of the pavement of about 175x 205 cm;

- secondary entrance by means of a vehicle gate (passing through a private property on which, according to what has been declared during an inspection, PromoTurismo FVG has a transit easement), to reach the private courtyard of the building. The building is delimited from the courtyard by a raised private pavement, 100 cm wide.

Fig.3 Main entrance with a pre-entrance with glass side walls.

Fig. 4 Secondary pedestrian entrance.

Fig.5 Secondary vehicle entrance.

Fig. 6 Internal courtyard and entrance at the back.

Across the street, opposite the Infopoint, there is a large public parking lot that still holds the old information office that, due to its position, visibility and maybe also out of habit, represents a landmark for the users, who frequently go there to consult the affixed posters to get some information about the new address of the office.

In the public parking lot the visitor can benefit from stalls on payment with gravel bottoms or from free stalls reserved for vehicles marked with the symbol for the disabled, indicated vertically and

horizontally, with a side strip, of respect for getting in or out of the vehicle. These are paved, without interruption up to the vehicle paths in the area and are linked to the perimetral pedestrian paths.

Fig.7 Public parking lot.

Fig.8 Stands reserved with indication.

The access to the information office imposes th crossing of Via Julia Augusta: the zebra crossings are very near to the entrance and exit of the parking lot where there are different conformities of the pedestrian pavement. The nearest crossing to Infopoint, in correspondence with the entrance to the parking lot isn't levelled with the street, so it can't be used by the disabled in wheelchairs.
There is a second pedestrian crossing near rhe exit from the parking lot, levelled with the street but without any tactilo-plantarindication to facilitate the movements of the blind. Using this crossing, from the parking lot side, a 112 cm pavement in cobblestones, levelled with the street in correspondence with the vehicle entries, that lead to the Infopoint entry, will be reached. The width of the pavement is reduced to 74 cm near the pedestrian entry to the private courtyard of the Infopoint due to the presence of a couple of lamp-posts and an energy-meter box. After this point, the pavement reaches 85 cm and remains so up to the area in front of the main entry of the Infopoint, which, as described before, is separated from the paement by a 4 cm high stone doorstep.

Fig.9 A levelled pavement.

Fig.10 Pavement with a narrowing due to lamp-post and an energy- meter box.

Fig.11 Pavement with a narrowing due to the railing.

The building where the information office lies stretches over one floor and is composed of four communicating rooms, of which, three are used exclusively by the staff and one is used to deal with the public. The internal space is systematic and with complanar floor. The building has a toilet which is not open to the public, and can be reached from the private courtyard at the back.

As the space open to the public is not very big, it enables a direct contact with the staff. The information counter is 110 cm high, it has a continuous curved form without any edges. The internal flooring in tiles is regular, complanar and in a good cromatic contrast between the floor and the walls/outfittings.

Fig.12 Internal space with brochure stand.

Fig. 13 Internal space with Information counter.

The user, welcomed by the staff can receive information and has free access to the brochures that inform about local and regional offers. They can also use the pc online to have access to the websites of the areas of interest. Besides, they can ask for paper material and multilingual audio -guides to visit the archeological sites of Aquileia on their own or book a guided visit.

PromoTurismoFVG has set up a collaboration with regional associations and authorities in order to improve the accessibility to the touristic offer. In collaboration with ANFFAS – Associazione Nazionale Famiglie di Persone con Disabilità Intellettiva e/o Relazionale(National Association of Families of people with Intellective or Relational Disability) and with Progetto Autismo FVG Onlus(Autism Project), a brochure in simplified language that describes the touristic heritage of the Region Friuli Venezia Giulia has been produced. In 2015, an agreement protocol was signed by PromoTurismoFVG and the "Consulta Regionale" (Regional Board) of the associations of the disabled and their families in Friuli Venezia Giulia to develop an accessable touristic product, created with the participationof the associations of CRIBA. This project has led to the examination of all the guided tours organized by PromoTurismoFVG in the mainplaces on the regional territory. In collaboration with onlus ENS - Ente Nazionale Sordi (National Authority for the Deaf), a free mediation service LIS on request has been activated.
At present, the elaboration of the audio version of the brochures is currently under way. It will be accessable through qr code put on the brochure itself.

Considerations for the improvement of the accessibility
Keeping in mind that the Infopoint office is the main reference point for tourist information and for the supply of material (paper, audioguide, etc) to carry out the visits on all the sites in Aquileia, the accessibility of the structure that houses it is of great importance.
The moving of Infopoint to the present position has created improvements in terms of internal comfort both for the staff and for the users, but undoubtedly, it has lost some of the elements of prestige of the previous location, such as: the position n the East side of Via Julia Augusta, the side where most of the sites that can be visited lie; the possibility to stop with greater safety and in large groups near the building and along the pedestrian and bike lanes.
In order to guarantee a full accessibility to the disabled it is necessary to:
1) eliminate the difference in height between the public pavement in cobblestones and the space of the private property determined by the doorstep corresponding to the arch under which the main entrance doors are vouched for in re-entrant position. This doorstep could be levelled or changed with a similar one put in a sloped position;
2) revise the morphology of the counter for the public, including a lowered position so that it won't be a barrier between the staff and the users;
3) plan a signal of the tactilo-plantar type to place on the pavement in cobblestones near the entrance arch, to permit the blind to identify the service offered;
4) insert an external signalization, clear and comprehensable for all (compliant with the requirements of visibility, cromatic contrast, type of letter, relative height, etc.) that makes the new office easily recognizable;

5) improve the zebra crossing and the mobility to permit all users to cross Via Julia Augusta safely and to have the possibility to reach the office. The main difficulty for all users with regards to the use of the new office is the distance from the parking lots, located on the opposite side of the road, rendering the crossing of the main road, famous for its constant traffic, necessary. The narrow pavement in front of the office makes it difficult, if not impossible, to make a 90° turn with a wheelchair to get to the entrance of the Infopoint and doesn't permit any group to stop there, even temporarily. So, it is urgently needed to guarantee an improvement, in terms of safety, of the pedestrian crossing near the new Infopoint office, that includes, in any case, a good vertical and horizontal signalization. Considering the various possibilities of access to the office, a possible intervention to guarantee the accessibility, may involve the public area facing the main entrance, regarding the public road and the two corresponding sections of the pavements. The intervention could include the relocation of the zebra crossing, the removal of the metal railing that lies in correspondence with the entrance to the office, in modifying the section of the pavement (opposite the office) levelling it to the street, as it already is on the side of the Infopoint office, and the introduction of tactilo-plantar signalization at the new crossing. Keeping in mind that these interventions should be arranged with the authorities in charge, it would be advantageous to activate practical arguments to limit the traffic speed and introduce solutions, even traffic lights, to protect the transit of pedestrians.

Summarizing Data Sheet

Here follows an elaborated summarizing diagram based on the analysis made and on the example produced by Associazione Tetra - Paraplegics F.V.G. O.n.l.u.s. for the web site: www.turismoaccessibile.fvg.it.

PARKING SITE	
Is there a parking site reserved for the disabled near the visiting area?	Yes
Is there a bus stop for public transport near the entrance to the visiting area?	No
Is there a pedestrian lane that can be used by an accompanied person, permitting a direct connection between the parking site and the visiting area?	Yes
Is the paving suitable for the passage of the disabled?	Yes
Are there any natural or artificial guides useful to the mobility of visitors with eye-sight disabilitiy?	Yes
ACCESS	
Is the area, in front of / behind the entrance at level or is it sloping	No

in a way to be accessible?	
Is the finishing of the paving in correspondence to the entrance homogeneous?	Yes
Are there elements that stick out of the paving (doormats, grills,closing pivots, etc)?	No
Is there any difference in height in correspondence to the entrance ?	Yes
Is there an access ramp or a sloping lane?	No
The access to the office is through:	An open wooden door
Are there any other facilitations to the entry?	No
INTERNAL ITINERARY	
Is the material that forms the paving suitable for the passage of visitors with a motoric disability?	Yes
Are there any natural or artificial guides useful to the mobility of people with eye-sight disability?	Yes
Is any potential preseence of steps marked with chromatic contrast elements?	No
If there is a ramp, does it have the right slope that can be passed on autonomously?	/
Are there any decorative elements and tools useful also to visitors with motoric difficulties ((maximum height 90 cm from the ground)?	Yes
Is the furniture along the itinerary a hindrance or a danger?	No
Are there any fire extinguishers lodged in a cavity?	No
Is the open doorway equal or wider than 75 cm?	Yes
Are there any visio-tactile maps?	No
Is the office supervised constantly by specialised personelle trained in welcoming the disabled?	Yes
VERTICAL CONNECTIONS	
Does the visiting office expand over different levels?	No
Is there a lift or a mechanical system to overcome the disparities?	No
Is there a stairway?	No
If so, has the finish of the steps any disconnected or slippery zones?	/
Is there a tactile paving that marks the stairway?	/
Are there any tapes with a sufficient chromatic contrast to mark the last tread?	/
Are there any railings at a 100 cm from the ground?	/
SIGNANE	
Is there any clear identifying signage comprehensive and easy to read (chromatic contrast, font, dimension, line-spacing etc.)?	No

Is there any clear directional signage, comrehansive and eas to read (chromatic contrast, font, dimension, line-spacing, etc.)?	No
Is there any informative signage that responds to the requisites of easy reading (chromatic contrast, font, dimension, line-spacing, etc)?	/
Is the signage placed at a height that permits the reading to visitors in a sitting position?	Yes
CONTENTS	
Are there any itineraries for guided visits, subject to booking, carried out by prepared personelle?	/
If so, who are they addressed to?	/
Can any audio-guides be found in loco?	Yes
If not or as an alternative, where can they be found?	/
Is there any printed material studied for different needs?	No
Are there any special projects, cultural initiative, didactic activities?	/
EXPOSITION	
It is possible for a person with motoric disability to have access to:	The information office is not accessible independently
It is possible for a person with audio disability, to have access to:	All the office
It is possible for a person with eye-sight disability to have access to:	All the office if accompanied
It is possible for a person with psychic disability to have access to:	All the office if accompanied
What elements limit physical access?	Presence of narrowing in the width of the pavement, parapets and height difference at the entrance portal
Is it possible to touch the works or parts of them at the presence of the personelle?	/
If so, what can be touched?	/
Is it possible to engage a helper in advance, who can give a description or accompany the visitor's hand during a tactile reading?	/
SERVICES	
Is there at least one toilet with the characteristic dimensions required by the regulations?	No
If so, is it signalised?	/
Are there any handles?	/
Are there any seats?	No
If so, do they have armrests?	/

Are there any fountains or water distributors?	No
Are there any waste-baskets?	No

BASILICA

Fig.1 External view of the Basilica of Aquileia.

The Basilica of Aquileia overlooks Piazza Capitolo and to the East, it is framed by the Heroes' Cemetery, and it lies within an architectural complex composed of the Baptistery, the Südhalle and the bell tower. It represents an architectural complex of significant importance, that in its essetial lines brings back up the structure wanted by the Patriarch Poppone (1019 -1042), who consecrated it in 1031. However, its origins date back to the second decade of the IV century A.D.
It's web-site, basilica.aquileia@virgilio.it, gives multilingual information (Italian, English, French, German, Russian). With regards to the main aspects useful to the visitor (opening/closing hours, booking methods, tickets, references, besides useful informaion on meteo and temperature), it indicates the behaviour regulations to be observed when entering the Sacred building and thanks to an interactive design, it describes with text and figures (without captions) the elements of the visit.
In the immediate neighbourhood of the Basilica, within a range of 60 m there are various parking sites:
1- Stalls on porphyry cobbled ground along Via Patriarca Popone;
2- Parking site paved in stone in Piazza Capitolo;

3- Parking site in gravel stones to the South-East of the Basilica.

On each parking area, the visitor can benefit, free of charge, from a stall, marked horizontally and vertically reserved for vehicles for the disabled. The stalls dedicated to the disabled have the same type of paving of the parking area, and are marked on the ground in yellow paint. There are no indications regarding the getting on and off vehicles nor linking ramps, nearby, between the vehicle lanes and potential adjacent pavements. This could determine a haphazard intermingling of the lanes due to the necessary transit of pedestrians on vehicle space, not always steady, especially to people with a motoric disability.

Fig. 2 Reserved stall in Piazza Capitolo.

Fig. 3 Reserved stall inVia Patriarca Popone.

Fig.4 Reserved stall at the public parking site in gravel. stones to the South-East of the Basilica.

Fig.5 Absence of pedestrian lanes and inevitable haphazard intermingling of passages.

From Via Patriarca Popone, the Basilica can be reached by crossing Piazza Capitolo, on a slightly descending lane, paved in stone topically ruined. Instead, from the parking site of Piazza Capitolo, the Basilica can be reached by means of a ramp with an inclination of more than 11%. This is the only path that can be defined accessible to visitors with eye-sight problems as it has natural guides identifiable from the enclosure walls and inside the buildings.

The stone slabs present two types of making: plain, easily walkable, and decorated.
The latter has an irregular surface and relevant grout lines that can cause inconvenience to people with motoric disability.

Fig.6 Connecting ramp between Piazza Capitolo and the Basilica.

Fig.7 The lane between Piazza capitolo and the Basilica

Maybe, the most complex connection is the one between the gravel-stone parking site and the Basilica due to the absence of lanes for the exclusive use of pedestrians. In fact, in order to obtain access to the stone lanes that lead to the Sacred building, there are two options to choose from:
1- cross the gravel stone parking site, get past the delimiting wall of the parking site which has a 5 cm step, and then go up a second step between the natural lane and the stone paving. The latter has the same characteristics of the paving of Piazza Capitolo;
2- go upon the grassy space, at a disparity of 12 cm as compared to the vehicle lane, cross it, overcoming the little level disparities caused by the natural character of the ground to reach the stone lane that takes to the building.
From the analysis of the place it can also be noted that the grassy space[16] at the side of the Basilica has stone and gravel slabs that connect, in a straight line, Via dei Patriarchi to the area of the entrance to the Basilica. If this were levelled and designed in the paving and delimitation to the parking site, it would facilitate the passage, rendering it more accessible.
The Basilica has only one entrance, that is central and on a level 48 cm lower than that of the Square. This disparity is resolved by three stone steps and a ramp with no kerbs or handrails and with an 18% declivity. This could be very dangerous and difficult to pass over without help even due to the absence of any supporting elements. The entrance is protected by coconut wicker mats

16 The grassy mantle is interrupted by signs on the ground, in stone material, which define the presence of the ancient Patriarchal Palace and the position of the columns of which some remains are exposed in the immediate vicinity, in adherence with the building of the Cromazian Hall. Of note is the lack of clear communication, both on the web and on the spot, of the meaning of these architectural signs.

and carpets on the paving both outside and inside the entrance gate. Corresponding to the ample portal, the threshold has a step with a riser of 3-4 cm.

Fig.8 Entrance to the Basilica.

Fig.9 Aided exit of wheelchair with triride.

The itinerary inside the building is organized and obligated. It starts on the right, over a glass footbridge with metal railings, 100 cm high, equipped with a higher glass level, with lateral protection of steel cables. Its width is 310 cm and even if it is interrupted in the central part by the columns, it doesn't hinder the mobility of the visitors, as the minimum width is 95 cm.

Fig.10 Glass footbridge with railings.

Fig.11 Metal ramp connecting the levels.

Fig.12 The passage of wheelchairs on the glass footbridge.

Fig. 13Descent with brake on glass footbridge.

Fig.14 Accompanied visit for people with cognitive disability.

Fig. 15 Accompanied visit for people wth cognitive disability.

The transparent surface of the glass footbridge permits an overall view of the mosaic floor, but it gives a feeling of unsteadiness and insecurity in people with an intellective disability who, even if they are prepared for it, they need constant company.

The glass footbridge is connected to the stone floor near the altar, on one side by means of a metal slope and on the other by means of a glass ramp both worked in such a way to prevent them from being slippery. Along the itinerary, the necessity to overcome level disparities that vary from 12 to 23 cm, is resolved by wooden slopes provided with non-slip adhesive strips. The declivity of these is rather high, even up to 19-24 %.

Fig.16 Wooden slope.

Fig. 17 Connecting wooden slopes.

The entrance to the affrescoed crypt is indicated by a small totem and by a descripive panel in Italian, English and Russian, which doesn't correspond completely to the expected standards of an easy reading.

Fig.18 Information panel of the crypt.

Fig.19 Information panel of the crypt.

he crypt can be reached by means of smooth stone steps with irregular elevations and treads, which can be slippery. Only a part of the ascending stairs is provided with a support: a metal handrail with a circular section.

The wooden ramp that permits the return to the entrance zone is the one that is mostly developed, it has a 14% declivity and is provided with a low, containment kerb, a handrail at a height of 70 cm, and paving with anti-slip adhesive strips.

The dark red carpets made of plastic material[17] that cover the paving lead to the exit zone and /or to the excavation crypt.

17 The plastic mats are a protective element for the flooring and at the same time they are recognizable elements, due to their good chromatic contrast, which act as path guides.

The exit from the Basilica can be reached by going back on the main lane or by means of a metallic stairway, only treads, with a double railing, highlighted by a strip in chromatic contrast. Continuing on the internal itinerary, the archeological crypt can be visited.

Fig.20 Assisted descent to the crypt of the affrescos.

Fig.21 Ascent ramp from the crypt with railings.

Fig.22 Wooden ramp with a railing at a height of 70 cm.

Fig.23 Descent assisted by a wooden ramp.

To enter here, a 4-5 cm doorstep coresponding to a double-panel wooden door has to be passed over. The perimetre of the plank floor that is connected with the doorstep is marked by a yellow and black adhesive tape and then it proceeds on glass footbridges. The footbridge of the archeological crypt is aesthetically similar to that of the Basilica: it proposes a 126 cm wide obligated double-way lane. At the first part of the lane, the metal railing is 100 cm high with a horizontal glass surface and protected by steel cables, to match the aesthetic solution of the aisles of the Basilica. In the following part, newly reviewed, the railing ends with a sloping level, in brownish steel, on which punctually, descriptive captions, giving information to the visitors about the mosaic work which is perceivable by them at first sight.

Fig.24 Railing of the first part of the lane.

Fig.25 Railing of the second part of the lane.

Fig.26 Desctiptive caption. Photo taken with the implementation of light.

Fig.27 Descriptive caption. Photo taken in environmental conditions.

The captions highlight a good chromatic contrast “Font et interlinea” (background and line-spacing) that permit an easy reading, nevertheless the urgent need of a better orientation of the lights for a better lighting of the texts is observed. The floor, with its declivity and height, lends itself well to tactile contents, texts in relief or in Braille.

Other descriptive contents inside the archeological crypt are displayed on vertical panels placed near the entrance where the bilingual text contents (Italian, English) introduce the visitor to the visit of the crypt. The panels are put on the side of the entrance, not to hinder the entrance/exit flux. The flooring immediately in front of the crypt is not uniform and it is covered with coconut wicker matting.

Fig.28 Vertical descriptive panels.

Fig.29 Flooring covered with coconut wicker matting.

In order to get to know the heritage of the complex, the So.Co.Ba. (Society for the conservation of the Basilica of Aquileia), has elaborated services of guided and autonomous visits, sensitive to the needs of people with eye-sight deficit. A service of guided visits subject to previous booking, with well-trained guides to accompany even groups of disabled people to discover the Basilica complex and the Sudhalle. The guided visits can be done both with the authorized guides, in various languages, and with the private guides of the groups. Generally, all the members of the group are provided with an audioguide that can be private or reserved previously at the ticket office of the Basilica. On the Internet website a simple and easily understandable graphic data-sheet is published. It highlights the visiting hours and the available days for booking. It must be noted that the itineraries of the visit are supervised by the guide according to the requirements of the group and with the necessary useful support[18].

In 2018, thanks to a collaboration with the Aquileia-Cervignano-Palmanova Rotary Club, an audioguide course, that uses the beacon technology and that supplies descriptive contents and movement indications, was held. This gives the possibility to people with eye-sight deficit to use it autonomously. The beacon can be described as a positioning system, defined by Apple as a “new class of transmitters” that can notify their own presence to nearby devices and permit the user to transmit and receive messages within a short distance. In this case, the visitor is supplied with a smartphone with earphones, that is turned on by the staff at the ticket office. The visitor, moving around, intercepts the beacons that transmit an impulse to the telephone that in turn notifies it to the user by means of a vibration. With a simple touch of the screen the visitor activates the reproduction of the message, or of the audio explanation. At present, there is only one support

18 People with intellectual disabilities are unable to understand the operation of radio guides and above all fail to pay constant attention to the explanation of the guide. For these reasons, they carry out guided tours without the use of earphones or supports. The guides, with printed images, draw the visitor's attention to make it easier for them to understand the explanation.

available that can be given free of charge, on request, to a blind visitor or one with eye-sight difficulty.

The So.Co.Ba. has the copyright of one free App, Basilica di Aquileia, with text, visual and virtual reality contents, that permits the visitor to visualize the evolution that the Complex has undergone during the various epochs, through 360° models, and make an immersive exploration discovering new points of view, even aerial ones. The contents can be seen on the display of the personal smartphone of the user or in virtual reality thanks to the use of Google Cardboards.

In addition to the services described above, the audioguides of PromoTurismoFVG, that are available at the Infopoint, can be mentioned.

At the moment, there is a study of the elaboration of a tactile map that will be set inside the Basilica and of another tactile element, that is being developed and could regard the representation of a mosaic. This study is being followed by C.R.I.B.A. and U.I.C.I.

It is necessary to mention that the Basilica has reception staff in charge of control, above all at the entrance and exit from the Basilica and the archeological crypt,who can help when needed.

The ticket office lies in a separate building, beside the toilets and near the parking-site in gravel-stones at about 50 m from the entrance to the Basilica. The visitor is guided by a directional signage on a 105 cm high portable metallic prop, set in correspondence with the Südhalle. This might not be very visible from afar, especially in the presence of a crowd.

Fig.30 Directional Indications.

Fig.31 Ticket Office.

The ticket office can be reached by 140 cm steps, delimited by railings on the sides, made of slabs suitable for exterior spaces, with no chromatic contrast elements neither at the beginning of the descent nor at the beginning of the ascent.

There are many prefabricated toilets, for men, women and the disabled. The way to the toilets is not indicated, and can be reached by crossing the green area beside the Basilica, following the

footsteps left on the grass, or else from the parking site where the continuation of the gravel stone paving with a sloping tract can be denoted.
The interior measurements of the toilet for the disabled are 180 x 224 cm. It is supplied with large horizontal and vertical handles and permits the necessary approach: side approach for the toilet bowl and frontal approach at the sink. The electric hand dryer is placed in a high position.

Fig.32 Toilets.

Fig.33 Toilet for the disabled

Fig.34 Access to the toilet area from the parking site in gravel stones.

Fig.35 Access to the toilet area from the green area.

At the moment, the drafting of the call for bids for the executive planning of the new toilets and of the ticket office is being drafted, aiming at rendering both services accessible and usable even by people with motoric disability. In fact, at the moment, all the visitors with a motoric disability can't get to the ticket office or to the toilets.

It is important to point out the need of some benches within the zone of Piazza Capitolo, considering the placing of the same in the shade. At the moment low walls in sunny spots are used as a seating accomodation by the visitors in search of other shady solutions.

Fig.36 Avisitor sitting at the foot of the columns at the entrance.

Fig. 37 Foreign tourists sitting on the grass near the Baptistry.

Considerations for the improvement of accessibility

Considering that the Basilica and its complex are the heart of Aquileia and the central element from where various itineraries can start, the accessibility to the structure, especially to its services, are of great importance.

As already said, various virtuous works have been done to improve the reception and the visit. The projects that are being made demonstrate the attention and sensibility that the So.Co.Ba. has for these aspects.

Parallel to the anlysis made, in order to guarantee the disabled a better accessibility to the complex, it could be useful to:

1) integrate the website with contents functional to the mobility and to the knowledge of the place, by inserting new instruments and a service card. It would be useful to indicate all the developed services (apps, audioguides with beacon) offered on the spot or procurable on other websites;

2) consider the possibility to put benches in Piazza Capitolo, after an analysis of the shading;

3) consider an accessible lane that connects the parking site in gravel stones to the new toilets and to the ticket office and then to the stone lane that takes to the Basilica. The project of the new toilets, considering that this is the mostly used public service, should keep in mind its use on a larger scale, including the possibility of "family use" with space where babies could have their nappies changed and where adults could refresh themselves and change when needed.

Both the toilets and the ticket office should be acceessible. During the planning it would be necessary to provide for the due adaptations of level disparities for an autonomous use, chromatic contrasts and the introduction of a tactile-plantar warnings;

4) resolve the issue of the promiscuity of the itineraries between the parking sites and the pedestrian lanes;

5)improve the access to the Basilica carrying out new opportune arguments with the institutions in charge. Take into account the insertion of chute links to surmount little disparities in front of the entrance to the Basilica and along the lane;

6) evaluate, with the institutions in charge, the improvement of the wooden ramps and the slopes inside the Basilica, in order to render them easier to walk on, and link the levels to the floor to avoid the stairs;

7) develop formative courses for all the members of the staff who come in contact with the visitors and take into consideration accompanying services in order to be able to overcome the critical points of the itineraries that can't be technically resolved;

8) evaluate, with the institutions in charge, the placement of a railing and/or step markers in chromatic contrast to help the descent to the archeological crypt;

9) evaluate, with the institutions in charge, the modification of the wooden ramp that leads to the exit zone and, besides the railing at the height of 70cms, plan another one at 100 cm;

10) insert or modify the directional and identifying indications (conforming with visibility requisites, chromatic contrast, type of character and relative height, etc.) to direct the visitor inside the Basilica and outside to identify easily the ticket office, the toilets and the other zones or structures;

11) insert or modify the fixed descriptive panels according to the requisites of visibility, chromatic contrast, type of character and relative height, etc, well studied in the layout, in the text and in the placement;

12) consider the realization of portable descriptive material in different languages (including Braille) and with web connections, so that it may be used by a wider range of visitors, as indicated in the introduction;

13) elaborate films in virtual reality to allow the vision of spaces that are not accessible to everybody. These can be visualized through multimedial totems or the use of qr-code or app;

14) consider the integration of visio-tactile contents on sloping floor and the railings of the archeologic crypt.

Summarizing Data Sheet

Here follows an elaborated summarizing diagram based on the analysis made and on the example produced by Associazione Tetra - Paraplegics F.V.G. O.n.l.u.s. for the web site: www.turismoaccessibile.fvg.it.

PARKING SITE	
Is there a parking site reserved for a disabled person near the visiting site?	Yes
Is there a stop for route buses near the entrance of the place to be visited?	No
Is there a planned pedestrian lane that, even if accompanied, permits a direct connection of the parking site to the entrance of the place to be visited?	Yes
Is the ground suitable for the transit of people with d motoric disability?	No
Are there natural or artificial guides useful to the mobility of people with eye-sight problems?	Yes
NOTE: This refers to the parking site of Via Capitolo.	
ACCESS	
The area in front and at the back of the entrance is coplanar or does it have such a slope as to be accessible?	No
Is the finishing of the paving correspondent to the access homogeneous?	Yes
Are there any elements that stick out of the limits of the paving (doormats, grids or closing pivots, etc.)?	Yes
Is there any difference in height at the entrance point?	Yes
Is there an access ramp or a sloping lane?	Yes
The access to the area is through:	An open wooden door
Are there any other facilitations to the physical access?	No
NOTE: The access to the Basilica needs assistance as the ramp is rather steep.	
INTERNAL ITINERARY	
Is the material that makes up the paving adequate for tha passage of people with motoric disability?	Yes
Are there any natural or artificial guides useful to the mobility of people with eye-sight disability?	Yes
Is the presence of steps signalized with elements of contrasing colours?	Not always
If there is a ramp, does it always have such a slope that can be walked on autonomously?	No
Are there any decorative elements and equipments useful even for persons with motoric difficulty (level at 90 cm from the ground at the most)?	Yes

Does the decorative element placed along the itinerary create an obstacle or danger?	No
Are there any fire extinguishers lodged in a cavity	No
Is the opening at least equal to or superior to 75 cm?	Yes
Are there any visio-tactile maps?	No
Is the area supervised continuously by specialized or trained personelle at the arrival of disabled visitors?	Yes
NOTE: visio-tactile elements are being planned; the ramps are walkable with company and/or motorized aid.	
VERTICAL CONNECTION	
Does the visiting area spread over various levels?	Yes
Is there a lift or a mechanic system to overcome the difference in levels?	No
Are there any stairways?	Yes
If so, does the finishing of the steps present any disconnected or slippery areas?	Not always
Is there a tactile paving that signalizes the stairway?	No
Are there any adhesive step-markers in a sufficiently clear chromatic contrast at the end of the steps?	Not always
Are there any railings at 100 cm from the ground?	Not always
SIGNANE	
Is there a clear, comprehensive and easily legible (Chromatic contrast, font, dimension, line-spacing, etc) signage?	No
Is there a clear, comprehensive and easily legible (chromatic contrast, font, dimension, line-spacing,etc.) directional signage?	No
Does the informative signage respond to the requisites of easy legibility (Chromatic contrast, font, dimension, line-spacing, etc.)?	Yes, in the archeological crypt
Is the signage placed at a height that can be read even by persons in a sitting position?	Yes
CONTENTS	
Are there any guided itineraries, subject to booking, done by trained personelle?	Yes
If so, who are they addressed to?	Motoric , visual, psychic disabilities and for Children
Can audio-guides be obtained in loco?	Yes, for visitors with eye-sight disability
If not, or as an alternative, where can they be obtained?	Infopoint of PromoTurismo FVG
Is there any printing material studied for different needs?	No

Are there any special projects, cultural initiatives, didactic activities?	Yes
EXPOSITION	
It is possible for a person with motoric disability to have access to:	All the itinerary with company and/or with motorized aid
It is possible,for a person with hearing disability to have access to:	All the itinerary
It is possible for a person with eye-sight disability to have access to:	All the itinerary if accompanied
It is possible for a person with psychic disability to have access to:	All the itinerary,if accompanied
What are the elements that limit physical access?	Stairs not marked with chromatic contrast tape and with no railings, steeply sloping ramps
Is it possible to touch the works or part of them in the presence of a staff member?	Yes
If so, what can be touched?	The columns
Is it possible to book in advance the help of a companion that can give a description or help touching the work for a tactile reading?	Yes
SERVICES	
Is there at least one toilet with dimensions in compliance with the current regulations, that allows the entry and the necessary approach?	Yes
If so, is it signalled?	No
Are there any large handles?	Yes
Are there any seats?	No
If so, are they provided with back and armrests?	/
Are there any fountains or water distributors?	Yes
Are there any waste baskets?	Yes

BAPTISTERY AND SÜDHALLE

Fig.1 External view of the Südhalle and a part of the Baptistery.

The Baptistery and the “Aula Cromaziana” are analysed together as a single element as they are physically connected. At the sides of the Baptistery, there used to be two symmetrical rectangular halls, discovered starting from 1893 and denominated respectively Nordhalle (North hall) and Südhalle (South hall) by the archeologists. The mosaic of the Sudhalle has been available to the public since 2011, inside a museum building realised on purpose in connection with the Baptistery. The baptistery and the Sudhalle, together with the Bell tower, are part of the architectural complex of the Basilica and are connected to the latter by means of a covered walkway. They are to the North of Piazza Capitolo and to the South of the green area where the ancient seat of the Patriarchal Palace used to be.

The website, basilica.aquileia@virgilio.it, as indicated in the data sheet of the Basilica, gives information about the principal aspects useful to the visits, the behavioural rules to enter the religious places and, through an interactive design, describes with text and images (without captions) the elements of the visit. The website of Fondazione Aquileia, www.fondazioneaquileia.it, presents a specific description of the Südhalle with informative notes on opening/closing hours,

tickets and guided services, besides a historical note and descriptive information of the mosaics exposed in it.

The most useful parking sites are within 60 m and are the same that serve the Basilica, so, they will be referred to in the detailed description in the specific data sheet.

The Baptistery has two entries with a double swing door, a main one which faces that of the Basilica and is kept open during visiting hours and a secondary one, normally kept closed, that connects the Baptismal font hall with Piazza Capitolo. Both have connecting steps between the external and the internal space.

The Baptistery has a very simple, rectilinear itinerary, but it moves on three different levels conneced by steps, sometimes of a considerable height. This necessarily imposes a limitation to the accessibility of the Building. As the Baptistery and the Südhalle are annexed buildings with a common entrance and insurmountable barriers, in the planning of the “Aula Cromaziana”, a big glass wall is included to permit the exposed mosaic finds to be admired from outside. This pursues the will to guarantee, as a minimum possible condition, at least “the view on the Asset”.

The access to the building is free of charge. From the entrance where the 81 cm high ticket booth is, there are two steps that lead down to the octagonal hall of the Baptistery where there are two doors, one facing the square and another leading to the museum area of the Südhalle. The floor of the Baptistery, as also the steps, are in smooth potentially slippery stone, while that of the Sudhalle, in processed stone, has an irregular non-slip surface. The height of the entrance steps of the Baptistery, vary from 10 to 16 cm, while those of the Südhalle, that are 19 cm high, have neither railings nor chromatic contrast elements, that would guarantee their visibility especially in descent. This is a critical element for certain visitors, particularly at the exit from the Südhalle and at the crypt of the Basilica. On the contrary, the steps that divide the first two halls of the Baptistery have a maximum risers’ height of 18-22 cm, and a 27 cm tread that are signalled by chromatic contrast tape.

Fig.2 External view from the entrance to the Baptistery.

Fig. 3 internal view from the secondary entrance to the Baptistery.

Fig.4 External view from the secondary entrance to the Baptistery.

Fig.5 Visitors on wheelchairs listening to the guide, while waiting to enter the Baptistery through the secondary door.

Fig.6 Internal view of the entrance from the Südhalle.

Fig.7 A visitor in difficulty trying to go down the steps leading to the Südhalle.

Fig.8 Internal view from the main entrance to the Baptistery signalled steps.

Fig.9 Internal view of the entrance to the hall with the and Baptismal font.

Internally, the Baptismal hall acquires a uniform pinkish colour, due to the natural light that enters through the glass ceiling and is covered with curtainings. These, with their shade tonality, alter the real chromatic perception of the hall that, notwithstanding this, and unlike the first two halls of the Baptistery, doesn't show any chromatic contrast between the floor and the walls. The hall is bright with homogeneous tones, contrary to the Südhalle where the space within which the visitor is free to move is rather dark in order to highlight the clarity of the mosaics. Here the artificial light and the dark colours of the walls and ceiling are used wisely to highlight the exposed mosaic display.

Fig.10 Internal view of the Baptismal hall.

Fig 11 Floor of the Südhalle.

Fig.12 Internal view of the Südhalle.

Fig.13 Railing of the Südhalle.

The walkable floor of the Südhalle is like a platform suspended over the mosaics underneath, defined by a instable mobile railing, made of cords with a metallic support 105 cm high.

The fixed informative equipment uses various implements. At the beginning of the itinerary, near the ticket counter, there is a multimedial totem that permits the view of the virtual reconstructions of Ancient Aquileia with videos and images. The slightly inclined surface 90 cm high permits the viewing of the contents. It is important to know that the visitors with a motoric disability can't easily

arrive at this place and, anyhow, the structure of the totem would have rendered difficult the viewing of the multimedial material to those in a sitting position. Inside the octagonal hall there is an informative panel on a mobile metallic support, like a bookstand, put on an inclined board at a 110 cm minimum and 130 cm maximum height. The text is rather long and difficult to read because of the excessive height of its support. Besides, due to its position and its light weight, it could be dangerous because it is easily knocked over or bumped into during the itinerary by distracted visitors or people with eye-sight disability who follow the perimetral walls as a guide.

Fig.14 Multimedial totem.

Fig.15 Informative panel on light support.

In the hall, in a defiladed and not dangerous position, there is also a metal box that displays liturgical stony plaques, highlighted by a good contrasting chromatic background. Even the textual contents, bilingual (Italian, English) that accompany them can be easily read for the type and dimension of character used, line-spacing and chromatic contrast. However, the position of the stand on the ground could make it difficult to read some of the contents. The same characteristics can be met in the bilingual textual contents (Italian, English) present on the walls of the Südhalle, with the exception of the characters that are slightly elongated.

Fig.16 Box structure support exposing plaque finds.

Fig. 17 Descriptive caption of the walls of the Südhalle.

For the knowledge of the heritage the So.Co.Ba. has elaborated guided visit services suitable for persons with eye-sight insufficiency already referred to in the profile of the Basilica.

Infront of the Baptismal font a platform has been installed to be used also by the guides to benefit of a higher position and be more visible by the visitors. This helps mostly deaf people to follow better the explanations of the guides through lip and gesture reading.

The ticket booth has been unified with that of the Basilica and it is located in an independent building, adjacent to the toilets, near the gravel stone parking site at a distance of 50 m from the entrance to the Baptistery. The visitor is guided by a portable directional signage on a metallic support 105 cm high corresponding to the Südhalle, that might not be visible from a distance in case of over-crowding.

Fig.18 Directional signage.

Fig. 19 Ticket booth.

Considerations for the improvement of accessibility.

Considering the morphological and spacial limits imposed by the structure of the Baptistery and by the character of maximum protection regarding it, it could be plausibly impossible to demolish the barriers determined by the existing stairways.

Face to face with the analysis carried out, in order to guarantee a better accessibility to disabled people one could:

1) integrate the website with the contents functional for mobility and for the knowledge of the place inserting the new tools and the Service Card. It might be useful to indicate the present criticalities, the necessity of an accompanied visit and the possibility of viewing the finds from the outside;

2) plan an accessible itinerary that connects the coble stone parking site and the stone lane that leads to: Basilica, Baptistery and Südhalle;

3) consider with the institutions in charge the improvement of the accessibility to the Baptistery, verifying also the possibility, in case the insertion of the ramps could make an excessive impact, to substitute the secondary door with a glass door that can be opened with the aim of having “a view on the exhibit”.

4) consider with the institutions in charge the placement of a handrail to help going down the steps, especially, those that have very high risers and and the insertion of non-slip elements to signalise the treads;

5) consider the removal of the information panel placed on a mobile bookstand and substitute it with a new descriptive panel realised in conformity with the requisites of visibility, chromatic contrast, type of character, relative height, etc, studied on the layout, in the text and in its placement inside the room in such a way so that it won’t be a hindrance or a danger;

6) consider the insertion in the Südhalle of a fixed steadier railing with potential tactile contents in relief;

7) consider the insertion of tactile elements, such as: tridimensional tactile reconstructions that can be disassembled to describe the architectural composition of the Complex; visio-tactile maps describing the rooms or the decorative elements inside them. Due to the plan to realise a new ticket office and the disuse (neglect, abandon) of the one at the entrance to the Baptistery, the elimination of the present counter can be taken into consideration to make room for an expositive area dedicated to visio-tactile elements;

8) develop training itineraries for all the staff who is in contact with the vsitors and evaluate the accompanying services in order to overcome the critical points of the itineraries that aren’t physically resolvable;

9) insert or modify the directional and identification signage (according to the requisites of visibility, chromatic contrast, type of character, relative height,etc.)

10) consider the realisation of portable descriptive materials in different languages and with the insertion of web connections in order to be functional to a vaster utility;

11) elaborate films in virtual reality that permit the vision of areas not accessible to everybody. These can be seen through multimedial totems or the use of qr-code or apps.

Summarizing Data Sheet

Here follows an elaborated summarizing diagram based on the analysis made and on the example produced by Associazione Tetra - Paraplegics F.V.G. O.n.l.u.s. for the web site: www.turismoaccessibile.fvg.it.

PARKING SITE	
Is there a parking site reserved for the disabled near the visiting area?	Yes
Is there a bus stop for public transport near the entrance to the visiting area?	No
Is there a pedestrian lane that can be used by an accompanied person, permitting a direct connection between the parking site and the visiting area?	Yes
Is the paving suitable for the passage of the disabled?	No
Are there any natural or artificial guides useful to the mobility of visitors with eye-sight disabilitiy?	No
ACCESS	
Is the area, in front of / behind the entrance at level or is it sloping in a way to be accessible?	No
Is the finishing of the paving in correspondence to the entrance homogeneous?	Yes
Are there elements that stick out of the paving (doormats, grills,closing pivots, etc)?	No
Is there any difference in height in correspondence to the entrance?	Yes
Is there an access ramp or a sloping lane?	No
The access to the area is through:	An open wooden door
Are there any other facilitations to the entry?	No
INTERNAL ITINERARY	
Is the material that forms the paving suitable for the passage of visitors with a motoric disability?	Not always
Are there any natural or artificial guides useful to the mobility of people with eye-sight disability?	Yes

Is any potential preseence of steps marked with chromatic contrast elements?	Not always
If there is a ramp, does it have the right slope that can be passed on autonomously?	/
Are there any decorative elements and tools useful also to visitors with motoric difficulties ((maximum height 90 cm from the ground)?	No
Is the furniture along the itinerary a hindrance or a danger?	Sometimes
Are there any fire extinguishers lodged in a cavity?	No
Is the open doorway equal or wider than 75 cm?	Yes
Are there any visio-tactile maps?	No
Is the area supervised constantly by specialised personelle trained in welcoming the disabled?	Yes
NOTE: The structure is not accessible to visitors with motoric disability due to the presence of stairways. An external view on the exhibit is planned.	
VERTICAL CONNECTIONS	
Does the visiting area expand over different levels?	Yes
Is there a lift or a mechanical system to overcome the disparities?	No
Is there a stairway?	Yes
If so, has the finish of the steps any disconnected or slippery zones?	Sometimes
Is there a tactile paving that marks the stairway?	No
Are there any tapes with a sufficient chromatic contrast to mark the last tread?	Not always
Are there any railings at a 100 cm from the ground?	No
SIGNANE	
Is there any clear identifying signage comprehensive and easy to read (chromatic contrast, font, dimension, line-spacing etc.)?	No
Is there any clear directional signage, comrehansive and eas to read (chromatic contrast, font, dimension, line-spacing, etc.)?	No
Is there any informative signage that responds to the requisites of easy reading (chromatic contrast, font, dimension, line-spacing, etc)?	Yes, in part
Is the signage placed at a height that permits the reading to visitors in a sitting position?	Yes
CONTENTS	
Are there any itineraries for guided visits, subject to booking, carried out by prepared personelle?	Yes
If so, who are they addressed to?	Motoric, visive, psychic disabilities,

	children
Can any audio-guides be found in loco?	Yes, for people with eye-sight disability
If not or as an alternative, where can they be found?	Infopoint of PromoTurismo FVG
Is there any printed material studied for different needs?	No
Are there any special projects, cultural initiative, didactic activities?	Yes
EXPOSITION	
It is possible for a person with motoric disability to have access to:	External area accompanied and/or with the use of mechanic help
It is possible for a person with audio disability, to have access to:	All the itinerary
It is possible for a person with eye-sight disability to have access to:	All the itinerary if accompanied.
It is possible for a person with psychic disability to have access to:	All the itinerary if accompanied
What elements limit physical access?	Steps, lack of signage with chromatic contrast, absence of handrails
Is it possible to touch the works or parts of them at the presence of the personelle?	Yes
If so, what can be touched?	The Baptismal font
Is it possible to engage a helper in advance, who can give a description or accompany the visitor's hand during a tactile reading?	Yes
SERVICES	
Is there at least one toilet with the characteristic dimensions required by the regulations?	Yes
If so, is it signalised?	No
Are there any handles?	Yes
Are there any seats?	No
If so, do they have armrests?	/
Are there any fountains or water distributors?	Yes
Are there any waste-baskets?	Yes
NOTE: The toilet is common for the Basilica and the Baptistery.	

DOMUS AND BISHOP'S PALACE

Fig.1 External view of Domus and Bishop's Palace.

The archeolgical area called Domus and Bishop's Palace can be visited, thanks to a museum building realised specifically to permit the visitor to understand the superimposition of the levels of the floor in different epochs. Here, the structures of a *domus* that can be dated back to the I-II centuries A.D., a big apsidal hall of the IV century, as well as mosaic and wall remains of the Episcopal Palace of the V century can be admired.

The building is located to the North of the Basilica complex and overlooks Piazza Capitolo. In aesthetic harmony with the Südhalle, it has a big glass wall that permits the visitors to see from outside, the hall and the elements exposed inside. Unlike the case of the Sudhalle, in this case, the "view on the exhibits" is not caused by inaccessibility to the building.

The website of Fondazione Aquileia, www.fondazioneaquileia.it, contains information in various languages (Italian, English, German, French and Russian) about the principal aspects useful to the visit: opening hours, gratuity of the visit and gives a historical description of the exhibits.

The nearest parking area is in Piazza Capitolo where, in a separate position as compared to the other stalls, there is one reserved for vehicles with the symbol for disabled people. This stall maintains the stone paving that characterises a large part of the square and it is indicated by

horizontal and vertical signage. The parking site is about 40 m away from the doorway to the structure. The stone paving has an important surface work, that together with the presence of rather wide grout lines, may create difficulty of movement to vistors with motoric disabilities. It is partially interrupted by a stone band, easily walkable, which ends in front of the museum.

Fig.2 External paving.

Fig.3 Glass wall.

Fig.4 Entrance.

Fig.5 Emergency Exit.

The structure has an emergency entrance and exit. The main entrance is separated from the external paving by a 3 cm stone doorstep. It can be identified by a single shutter door without glass 120 cm wide (kept open by the staff). This entrance takes to a covered rearward area, 155x223 cm with a paving covered by coconut carpeting, held down by metal runners. From this passageway, a single shutter glass door, 87 cm wide, permits the access to the museum area. The emergency exit, used also as a second entrance when necessary, permits direct entrance to the exhibit hall. Also this is separated from the external paving by a doorstep 3 cm high and has a a door without glass, 120 cm wide which can be opened only from the inside by means of an anti-panic handle.

The structure spreads over two floors: on the ground floor the archeological finds of the site are exposed, while on the second floor there is also a space for temporary exhibitions. The two floors are connected by a lift, 86x120 cm internally, fitted with a back-lit keyboard in chromatic contrast and a braille code, placed at an approximate height of 100 cm and a stairway with a width that varies from 100 to 162 cm, getting wider going up.

The path on the ground floor has a paving that for its material, colour and morphology recalls the exterior one, with narrower grout lines. The surface work on the paving may be perceived by some users as a disturbing and hindering element. The passage is 165 cm wide and has only one bottleneck where it reduces to 85 cm. It is protected by glass railings, 100 cm high, with chrome-plated finishings and rounded corners.

The room is being planned in very dark tones to emphasize the clarity of the mosaics and of the finds, even thanks to the use of artificial lighting elements.

Fig.6 Internal paving.

Fig. 7 The narrowest point of the passage.

Fig.8 Internal space.

Fig.9 Glass railings with rounded chrome-plated corners.

The stairway that connects the two floors, is painted in much lighter tones of colours as compared to the exhibition room. The only dark element in the room is the railing.

The first floor is characterised by elements in strong chromatic contrast. First of all, the floor, in grey resin is clearly different from the light tones of the stairway walls, and secondly, the props, in bent sheet metal, host the lodgings for five tablets. These tablets, not yet installed, will permit the visitors to browse in Ancient Aquileia through the app Antica Aquileia 3D, downloadable free of charge by visitors also on personal devices. This app permits the acquisition of historical notions of the city and a detailed study of some areas and sites by means of descriptive texts, pictures, 360° virtual reconstructions and in augmented reality.

Fig.10 Stairway with the detail of the railing.

Fig.11 Chromatic contrast between the paving of the first floor and the stairway.

Fig.12 Props for the tablet lodgings.

Fig.13 Chromatic contrast of the first floor paving.

On the ground floor there are visual, textual and graphic informative supports regarding the internal and external walls of the building. The Italian textual contexts are understandable, but those written in italics do not fully comply with the standards required for easy reading. Inside the building,

there are two screens that permit the vision of pictures in relation to the work and to the excavations.

Fig.14 Textual contents of the internal walls.

Fig.15 A video with images of the internal walls.

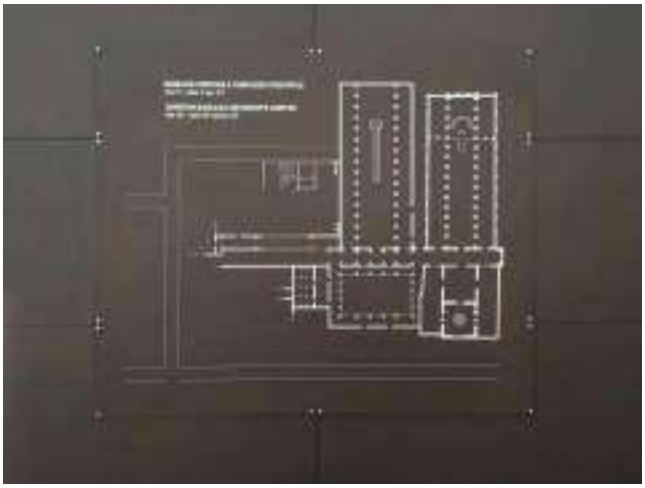

Fig.16 Graphic contents of the external walls.

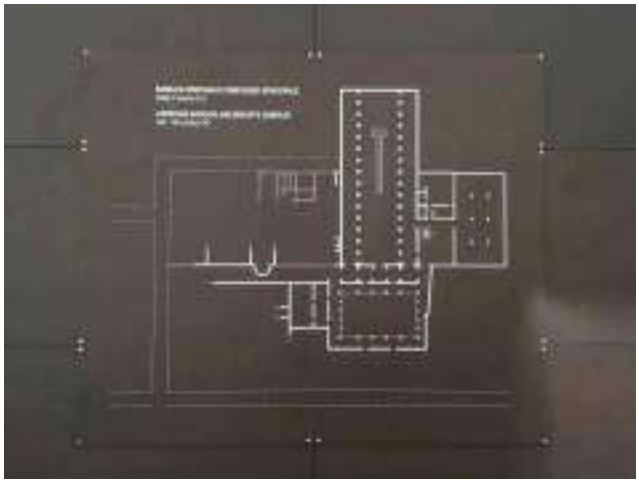

Fig.17 Graphic contents of the external walls.

In order to acquire a more detailed knowledge, pre-booked services of guided visits followed by trained personel are available. Instead, the visitor who would like to explore the site autonomously, can receive information by using the audio-guide that can be obtained from the Infopoint of the PromoTurismoFVG.

The ticket office is in the entrance area of the structure. The counter presents clearly the behavioural prohibitions prescriberd, through the use of symbols of instant understanding. It has a minimal and monolithic aspect. It’s 120 cm high and conceals the personnel in service. However, due to the minimal distances, the staff has no difficulty in perceiving the presence of a visitor.

Considerations for the improvement of the accessibility

In response to the analysis carried out, in order to guarantee better accessibility to visitors with disabilities, it could be useful to:

1) complete the Internet site with contents useful to mobility and to the knowledge of the place, by inserting new tools and a Service Card;

2) evaluate interventions for the improvement of the practicability of the external paving. A possible solution could be the extension of the grey stone band up to the entrance of the museum and then to the Fondo Cossar;

3) eliminate the 3 cm difference of level between the external paving and the doorsteps, intervening on the outside;

4) evaluate the insertion of visuo-tactile elements to complete the information provided during the visit;

5) evaluate the realisation of a tridimensional decomposable model to permit the comprehension of the stratifications and the typology of the finds even to blind visitors. The exhibiting room on the first floor could be used to host other information tools besides those already planned;

6) evaluate the realisation of portable descriptive material, elaborated with different languages and with the insertion of links with the web in order to be useful to a larger number of visitors.

7) evaluate the arrangement of itineraries of accessible audio-description;

8) evaluate the levelling of part of the internal paving to render it more homogeneous;

9) in the new planning of the signage consider the observance of the standards that guarantee easy reading (compliance with the requisites of visibility, chromatic contrast, type of characters and relative height etc), evaluate the insertion of data relating to the distances from one visiting point to the other, a contact telephone number for emergencies, qr-code to obtain links with the contents of the videos, the 3D reconstructions, videos in the sign language and/or captions, as well as to be able to consult the contents of the panel in enlarged characters.

Summarizing Data Sheet

Here follows an elaborated summarizing diagram based on the analysis made and on the example produced by Associazione Tetra - Paraplegics F.V.G. O.n.l.u.s. for the web site: www.turismoaccessibile.fvg.it.

PARKING SITE	
Is there a parking site reserved for a disabled person near the visiting site?	Yes
Is there a stop for route buses near the entrance of the place to be visited?	No

Is there a planned pedestrian lane that, even if accompanied, permits a direct connection of the parking site to the entrance of the place to be visited?	Yes
Is the ground suitable for the transit of people with d motoric disability?	No
Are there natural or artificial guides useful to the mobility of people with eye-sight problems?	No
ACCESS	
The area in front and at the back of the entrance is coplanar or does it have such a slope as to be accessible?	Yes
Is the finishing of the paving correspondent to the access homogeneous?	Yes
Are there any elements that stick out of the limits of the paving (doormats, grids or closing pivots, etc.)?	No
Is there any difference in height at the entrance point?	Yes
Is there an access ramp or a sloping lane?	No
The access to the area is through:	An open metal door
Are there any other facilitations to the physical access?	No
NOTE: The entrance to the museum area is through a glass door.	
INTERNAL ITINERARY	
Is the material that makes up the paving adequate for tha passage of people with motoric disability?	No
Are there any natural or artificial guides useful to the mobility of people with eye-sight disability?	Yes
Is the presence of steps signalized with elements of contrasing colours?	No
If there is a ramp, does it always have such a slope that can be walked on autonomously?	/
Are there any decorative elements and equipments useful even for persons with motoric difficulty (level at 90 cm from the ground at the most)?	Yes
Does the decorative element placed along the itinerary create an obstacle or danger?	No
Are there any fire extinguishers lodged in a cavity?	No
Is the opening at least equal to or superior to 75 cm?	Yes
Are there any visio-tactile maps?	No
Is the area supervised continuously by specialized or trained personelle at the arrival of disabled visitors?	Yes
VERTICAL CONNECTION	
Does the visiting area spread over various levels?	Yes
Is there a lift or a mechanic system to overcome the difference in	Yes

levels?	
Are there any stairways?	Yes
If so, does the finishing of the steps present any disconnected or slippery areas?	No
Is there a tactile paving that signalizes the stairway?	No
Are there any adhesive step-markers in a sufficiently clear chromatic contrast at the end of the steps?	No
Are there any railings at 100cm from the ground?	Yes
SIGNANE	
Is there a clear, comprehensive and easily legible (Chromatic contrast, font, dimension, line-spacing, etc) signage?	No
Is there a clear, comprehensive and easily legible (chromatic contrast, font, dimension, line-spacing,etc.) directional signage?	No
Does the informative signage respond to the requisites of easy legibility (Chromatic contrast, font, dimension, line-spacing, etc.)?	Partly
Is the signage placed at a height that can be read even by persons in a sitting position?	Yes
CONTENTS	
Are there any guided itineraries, subject to booking, done by trained personelle?	Yes
If so, who are they addressed to?	Motoric , visual, psychic disabilities and for Children
Can audio-guides be obtained in loco?	No
If not, or as an alternative, where can they be obtained?	Infopoint of PromoTurismo FVG
Is there any printing material studied for different needs?	No
Are there any special projects, cultural initiatives, didactic activities?	Si
EXPOSITION	
It is possible for a person with motoric disability to have access to:	The lookout with accompaniment and / or use of motorized aids
It is possible,for a person with hearing disability to have access to:	All the itinerary
It is possible for a person with eye-sight disability to have access to:	All the itinerary if accompanied
It is possible for a person with psychic disability to have access to:	All the itinerary if accompanied
What are the elements that limit physical access?	Presence of uneven paving and scale without elements of chromatic contrast
Is it possible to touch the works or part of them in the presence of a staff member?	No
If so, what can be touched?	/

Is it possible to book in advance the help of a companion that can give a description or help touching the work for a tactile reading?	Yes
SERVICES	
Is there at least one toilet with dimensions in compliance with the current regulations, that allows the entry and the necessary approach?	No
If so, is it signalled?	/
Are there any large handles?	/
Are there any seats?	Yes
If so, are they provided with back and armrests?	Seats with backrest
Are there any fountains or water distributors?	No
Are there any waste baskets?	No
NOTE: the public toilet of the complex of the Basilica can be used.	

FONDO CAL

Fig.1 View of the finds of Fondo Cal.

Fondo Cal is an archeological area situated to the West of Via Julia Augusta, where the remains of the ancient *domus* can be found. In fact, upon this area, there is a residential quarter, whose remains belong to various houses of different epochs of the urban history of Aquileia, which demonstrates that, in the course of time, (from the I to the IV/V centuries AD) the dwellings were object of numerous modifications, refurbishments and unifications.

The area is presented on the Internet site of Fondazione Aquileia, www.fondazioneaquileia.it, that gives information about the main aspects useful to the visit and presents historical notes, pictures and videos of the tridimensional historical reconstruction of the site.

The area is situated in the heart of Aquileia, overlooking Via Patriarca Popone, a passage that takes to the Basilica, on which there are some parking stalls. The only stall free of charge, is reserved for vehicles with the symbol for people with disabilities, indicated vertically, (the horizontal indication is illegible). It is the one nearest to Piazza Capitolo which is about 110 m away from the archeological area that's being analysed. Other bigger public parking areas can be found near the Infopoint or the Basilica, respectively at 210 m and at 330 m away from Fondo Cal.

From the parking area of Via Patriarca Popone, the visitor has to cross the road to reach the pedestrian passage more to the North. This is necessary to avoid the narrowings of the pavement along Via Julia Augusta that would hinder or obstruct the passage. From the parking area, crossing the road, the pavement is reached and, proceeding towards North, there is the zebra crossing in Via Julia Augusta. The pavements on both sides are provided with linking slopes. However, it can be noted that there is a 3 cm step between the street level and the pavement.

Going along the 154 cm wide porphyry pavement, that flanks the wall of Fondo Cal, the visitor reaches the archeological area. It has only one entrance that is marked by a little old plaque that reads: “Case ed Oratori Romani” (Roman houses and oratories) and by a more recent identifying signage, present in almost all the areas, but here it is placed on one of the entrance shutters. And so, it is not visible during the opening hours. The electrified wooden double-swing entrance door is 250 cm wide with a cement threshold. If necessary, the electrified shutters can be opened from the inside by means of a pushbutton.

Fig.2 External view of the main entrance.

Fig.3 View of the crossing in Via Julia Augusta.

The archeological area lies on ground covered with turf with a varying altimetric profile. It lies on a lower level as compared to that of the external pavement, and above all, at the perimetral part adjacent to the road, it is in descent towards the excavation areas. These areas are delimited by wooden railings, 100-110 cm high and by low demarcations of metallic pegs and rope.

Inside the Fondo the threshold is perfectly linked to the trampling floor and it generates a 4 cm step, followed by a descending slope in mixed gravel and soil, delimited by metal blades inserted in the ground. These stick out slightly at the sides. Between the entrance gate and the beginning of the itinerary, the tramplng floor is natural, in mixed gravel and turf.

Fig.4 Internal view from the main gate.

Fig.5 Internal view of the natural path.

The archeologic area presents definite and planned procedures that take the visitor to a raised walkway as compared to the historical level of the finds. The footbridges are of two types: wooden and metalic. The first, has a width that varies from 218 to 213 cm and a length of 23 m with 100 cm high railings and is rectilinear and sloping. At the beginning and at the end, there are steps 3,7,9 cm high, marked by yellow and black adhesive strips, to be more visible. This straight walkway procedes with a widening where the turf is alternated by stones. At this point and going West, the excavation areas are delimited by a low fence of metal pegs about 50 cm high and rope, similar to that of Fondo Pasqualis.

The second footbridge, in steel, with the paving in metallic grids, is 120 cm wide and is a coplanar continuation of the wooden one described previously. At its joint, it maintains a regular level and presents a high declivity ascending slope, only at the final tract, in order to link to the turf.

Fig.6 Walkways.

Fig.7 Final tract of the wooden walkway with security signage.

Fig.8 Delimitation of the excavation areas.

Fig.9 Connection of the two walkways.

Fig.10 Walkways with steel elements.

Fig.11 Final tract of the metallic walkway with a high declivity slope.

A great importance is given to the itineraries of guided visits due to the fact that there are no specific informative supports. The user who wishes to explore the site autonomously and to have extra notions, can benefit from the audio-guides that can be obtained from the Infopoint of PromoTurismoFVG.

The only informative panel to be found on the place is in the entrance area and it is of the same shape as the panels described in the other archeologic areas. It is self-supporting and vertical and contains an identification map of the place as well as a brief historical description of the site. Due to the presence of different colours, the indicating element “You’re here”, is not easy to detect, as it is confused with the background. The informative textual contents written in italics and font are not compliant with the requisites expected for an easy reading. At present, the informative elements are being planned.

The users can also find waste bins and cement seats of different morphology. They are compliant with those found in the other sites and they are placed in a scattered way, even among the trees.

Fig.12 Informative panel.

Fig.13 Example of a cement seat.

Considerations for the improvement of accessibility

Considering that Fondo Cal is at a short distance from the Basilica, the users can benefit from the services offered there, such as the toilets, while nearby there may be the planning of a drinking fountain.

The autonomous physical accessibility to the site is partially resolved thanks to the planned itineraries. In order to improve the accessibility for visitors with disabilities it could be useful to:

1) complete the Internet site with contents useful to moblity and to the acquaintance with the place, by inserting new tools and a Service Card. At present it would be useful to indicate the necessity of the use of aids dedicated to a mobility on natural and varied ground and/or a helper;

2) evaluate a tactilo-plantar signage, placed on porphyry paving in corrispondence with the pedestrian crossings in Via Julia Augusta and in correspondence with the entrance to the area, that permits blind visitors to identify the service. As to the pedestrian crossings near the entrance to Infopoint, systems to reduce the speed of the traffic should be considered ;

3) improve the accessibility to the area by linking the step at the entrance door with the internal footfall, already planned, evaluating the compactness of the material and the slope to limit as much as possible, keeping it absolutely within the limit of 8%. It must be kept in mind that the itineraries should guarantee the identification of the edges;

4) in the new planning of the signage, consider the compliance with the standards that guarantee an easy reading as already indicated in the previous sheets.

5) evaluate the insertion of a visuo-tactile map that explains theo rganisation of the Fondo and of the position of the finds, to be placed within the area near the entrance in a position not to cause hindrance or danger. This tool should be planned evaluating a suitable chromatic contrast and the insertion of writings in relief and in braille.

6) evaluate the arrangement of accessible audio-descriptive itineraries.

7) evaluate the insertion of integrative elements to the seats in order to render them more functional and ergonomic, and ischial supports, placed in a way to permit a comfortable contemplation of the site and the consultation of potential descriptive panels.

Summarizing Data Sheet

Here follows an elaborated summarizing diagram based on the analysis made and on the example produced by Associazione Tetra - Paraplegics F.V.G. O.n.l.u.s. for the web site: www.turismoaccessibile.fvg.it.

PARKING SITE	
Is there a parking site reserved for a disabled person near the visiting site?	Yes
Is there a stop for route buses near the entrance of the place to be visited?	No
Is there a planned pedestrian lane that, even if accompanied, permits a direct connection of the parking site to the entrance of the place to be visited?	Yes
Is the ground suitable for the transit of people with d motoric disability?	Yes
Are there natural or artificial guides useful to the mobility of people with eye-sight problems?	No
ACCESS	
The area in front and at the back of the entrance is coplanar or does it have such a slope as to be accessible?	No
Is the finishing of the paving correspondent to the access homogeneous?	Yes
Are there any elements that stick out of the limits of the paving (doormats, grids or closing pivots, etc.)?	No
Is there any difference in height at the entrance point?	Yes
Is there an access ramp or a sloping lane?	Yes
The access to the area is through:	An open wood door
Are there any other facilitations to the physical access?	No
INTERNAL ITINERARY	
Is the material that makes up the paving adequate for tha passage of people with motoric disability?	Not always
Are there any natural or artificial guides useful to the mobility of people with eye-sight disability?	Yes
Is the presence of steps signalized with elements of contrasing colours?	Yes
If there is a ramp, does it always have such a slope that can be	Not always

walked on autonomously?	
Are there any decorative elements and equipments useful even for persons with motoric difficulty (level at 90 cm from the ground at the most)?	No
Does the decorative element placed along the itinerary create an obstacle or danger?	No
Are there any fire extinguishers lodged in a cavity?	No
Is the opening at least equal to or superior to 75 cm?	Yes
Are there any visio-tactile maps?	No
Is the area supervised continuously by specialized or trained personelle at the arrival of disabled visitors?	No
NOTE: internal paths are being integrated.	
VERTICAL CONNECTION	
Does the visiting area spread over various levels?	Yes
Is there a lift or a mechanic system to overcome the difference in levels?	No
Are there any stairways?	No
If so, does the finishing of the steps present any disconnected or slippery areas?	/
Is there a tactile paving that signalizes the stairway?	/
Are there any adhesive step-markers in a sufficiently clear chromatic contrast at the end of the steps?	/
Are there any railings at 100 cm from the ground?	Yes
SIGNANE	
Is there a clear, comprehensive and easily legible (Chromatic contrast, font, dimension, line-spacing, etc) signage?	No
Is there a clear, comprehensive and easily legible (chromatic contrast, font, dimension, line-spacing,etc.) directional signage?	No
Does the informative signage respond to the requisites of easy legibility (Chromatic contrast, font, dimension, line-spacing, etc.)?	No
Is the signage placed at a height that can be read even by persons in a sitting position?	Yes
NOTE: the signage is being re-designed.	
CONTENTS	
Are there any guided itineraries, subject to booking, done by trained personelle?	Yes
If so, who are they addressed to?	Motoric , visual, psychic disabilities and for Children
Can audio-guides be obtained in loco?	No
If not, or as an alternative, where can they be obtained?	Infopoint of PromoTurismo FVG
Is there any printing material studied for different needs?	No

Are there any special projects, cultural initiatives, didactic activities?	Si
EXPOSITION	
It is possible for a person with motoric disability to have access to:	The lookout with accompaniment and / or use of motorized aids
It is possible,for a person with hearing disability to have access to:	All the itinerary
It is possible for a person with eye-sight disability to have access to:	All the itinerary if accompanied
It is possible for a person with psychic disability to have access to:	All the itinerary if accompanied
What are the elements that limit physical access?	Presence of ground in grass and gravel
Is it possible to touch the works or part of them in the presence of a staff member?	No
If so, what can be touched?	/
Is it possible to book in advance the help of a companion that can give a description or help touching the work for a tactile reading?	Yes
SERVICES	
Is there at least one toilet with dimensions in compliance with the current regulations, that allows the entry and the necessary approach?	No
If so, is it signalled?	/
Are there any large handles?	/
Are there any seats?	Yes
If so, are they provided with back and armrests?	No
Are there any fountains or water distributors?	No
Are there any waste baskets?	Yes

FONDO COSSAR

Fig.1 View of the new structure of the covering of the Fondo Cossar.

Fondo Cossar is an archeological area situated to the North-West of the Domus and Bishop's Palace, delimited on the North-East of the cycling lane that separates it from the Via Sacra.

In the central sector of the archeological area, the perimeter of a big *domus,* that developed transversally between the two street axes has been discovered. The researchers indicate that the first century AD structure, revolved on an uncovered central space, surrounded by a mosaic *ambulacrum*, provided with a fountain, on its oriental side. Overlooking the garden, there was the main room of the house, with a simple white mosaic surface, that had undergone various refurbishments along the years.

The remains of the walls of the *domus* permit the comprehension of the architectural composition of the rooms and of the museum furnishings. At present, its covering is being made to evoke the volume of the structure and the floor decorations, that later will be replaced in loco, are being restored. When the work is completed, the areas will become a didactic space of strong importance as it will help to understand the composition and the impact that the *roman domus* had.

The Internet site of Fondazione Aquileia, www.fondazioneaquileia.it, presents the area from the historical point of view and includes a video and some images from its historic tridimensional reconstruction. Currently, the excavation area is closed to the public, due to work in progress.

The plot can be reached on foot from Piazza Capitolo and from the cycling lane where the two respective entrances, that can be called Southern Entrance and Eastern Entrance, stand.

The nearest parking sites are two, one is near Infopoint and the other one is in Piazza Capitolo which serves also the complex: Basilica, Domus and Bishop's Palace. Both have already been described in the previous sheets on Infopoint and Basilica.

From the parking site near Infopoint, the visitors can reach the Eastern Entrance by means of a path, 225 m long, used as a cycling lane and as a foot path. The path consists of an asphalted driveway with parts in gravel stones and then continues on the cycling lane. This is separated from the Entrance of the archeological site by a grassy area. The metallic gate is 290 cm wide, and is provided with a rather protruding central block that immobilizes the swinging doors, but that can be a dangerous stumbling block.

Instead, the parking site in Piazza Capitolo is about 50 m from the Southern entrance of the structure. The paving in porphyry has an elaborated surface that, together with the rather wide grout lines can create difficulty for the mobility of visitors with motoric disabilities. It is partially interrupted by a stone band, easily walkable, but which ends in front of the museum volume erected to host the mosaics of the Domus and those of the Bishop's Palace.

Fig.2 External view of the Eastern entrance.

Fig.3 Internal view of the Eastern entrance.

Fig.4 External view of the Southern entrance.

Fig.5 Internal view of the Southern entrance.

Fig.6 Block on the ground.

Fig.7 Protruding sewer covers.

The Southern entrance consists of an electrified metallic, double-swing portal, 270 cm wide, close to the access tothe Domus and Bishop's Palace. If needs be, it can be opened from the inside using a pushbutton .

The metallic portal is provided with a central block that sticks out from the ground, whose purpose is to stop the double-swing doors, but that could turn out to be a stumbling block. What's more, it is not easily detectible as it is made of the same material as the paving.

The archeological area is characterized by a natural grassy ground, with its natural disparities. The Southern path has an initial tract in gravel stones of sizes that vary from 300 to 250 cm at the protruding sewer covers. Then it goes on in grassy ground flanking the 10 to 30 cm thick cement flows, on which some mosaics were placed, that can no longer be fully enjoyed because of their long direct exposure to the meteorological elements.

The escavation lies from a 23 m to less than 1 m distance from the surrounding walkable level, with a partially badly ruined ground. At the moment, it is also a space that separates the area that can be visited from the area of the construction site.

Fig.8 The covering structure.

Fig. 9 The covering structure.

Fig.10 Covered pathways.

Fig.11 Covered paths.

Part of the planned covering structure has been finished. It has a perimetral path in wooden planks, delimited by metallic railings 100 cm high. The “U” shaped path has different lengths and widths. The first stretch is 33.80 m long and 1.37 m wide, connected at 90° to a stretch 24.30 m long and 1.17 m wide, which, in turn, is connected to the last tract 14.20 m long and 1.33 m wide. From these, some internal paths, that will guarantee the possibility of rotation for visitors on wheelchairs within the 10 m, as provided for by the law, should be included.

Some of the information panels in loco are amply deteriorated. The more recent ones are placed near the two entrances. They are compliant in type, layout and contents, with the signage tools present in the other archeological areas. They are self-supported with vertical development, on which there is a map of the place and a short historical description of the site. Due to the various

colours of the map, the element indicated by “You’re here” is not particularly evident, as it gets mixed up with the context. The informative texts are written in *italics* and font that aren’t compliant with the requisites of easy reading. The informative elements are being planned.
As a service to the users, the site offers various cement seats and waste bins, placed all over the place, even among the trees.

Fig.12 Panel describing area.

Fig.13 Cement slabs with mosaics deteriorated by atmospheric agents.

Fig.14 Seats under the shade of the trees.

Fig.15 Seats under the sun.

Considerations for the improvement of accessibility

Keeping in mind that the area is, at the moment, a construction site, no indications on the structure can be presented as it is being realised.
Generally speaking the following suggestions can be made:
1) complete the Internet site with contents useful to the mobility of the visitors and to help them get acquainted with the place, including also new tools and a Service Card. At present it would be

useful to indicate the peculiar natural character of the area and the necessity of the use of aids dedicated to a mobility on natural and not homogeneous ground and/or a helper;
2) plan itineraries, linking the two entrances (up to the nearest paving) and a future access platform to the built structure. During the realisation of the platform, the stability of the ground, the reduction of the maximum slopes, the dimensions in compliance with the requisites of the regulations and with the demands of mobility and the necessity to adopt itineraries that permit the visitors to pinpoint the extremities, should be taken in consideration;
3) evaluate the insertion of a tactilo-plantar signage in correspondence to the entrances of the area to permit the identification of the service by blind visitors and to mark the cycling lane;
4) in the new planning of the signage consider the observance of the standards that guarantee an easy reading (compliance with the requisites of visibility, chromatic contrast, type of letters and relative height, etc.), evaluating the insertion of the data in relation to the distances from other visiting points, a contact number for emergencies, qr-code to obtain connection with videos, reconstructions in 3d, videos in sign language and/or with captions, as well as to consult the contents of the panel in enlarged letters;
5) evaluate the realisation of visuo-tactile tools that communicate the organisation of the Fondo and of the structure of the reconstructed *domus*, with appropriate chromatic contrast, writings in relief and in braille;
6) evaluate the realisation of portable descriptive material, elaborated with different styles of language and with the insertion of connections with the Internet in order to be operational to a broader range of public;
7) evaluate the preparation of accessibe audio-descriptive itineraries;
8) evaluate the insertion of completing elements to the seats to render them more functional and ergonomic;
9) evaluate the disposition of the seats, creating a shady area assigned to accomodate groups during the preparation for the visit. In this area a platform could be planned so that the guides may have an elevated position and be more visible to the visitors. This element could help especially deaf visitors to follow the explanations better through lip and gestual reading.

Summarizing Data Sheet

Here follows an elaborated summarizing diagram based on the analysis made and on the example produced by Associazione Tetra - Paraplegics F.V.G. O.n.l.u.s. for the web site: www.turismoaccessibile.fvg.it.

PARKING SITE	
Is there a parking site reserved for a disabled person near the visiting site?	Yes
Is there a stop for route buses near the entrance of the place to be visited?	No
Is there a planned pedestrian lane that, even if accompanied, permits a direct connection of the parking site to the entrance of the place to be visited?	Yes
Is the ground suitable for the transit of people with d motoric disability?	No
Are there natural or artificial guides useful to the mobility of people with eye-sight problems?	No
ACCESS	
The area in front and at the back of the entrance is coplanar or does it have such a slope as to be accessible?	Yes
Is the finishing of the paving correspondent to the access homogeneous?	No
Are there any elements that stick out of the limits of the paving (doormats, grids or closing pivots, etc.)?	Yes
Is there any difference in height at the entrance point?	No
Is there an access ramp or a sloping lane?	No
The access to the area is through:	An open metal door
Are there any other facilitations to the physical access?	No
INTERNAL ITINERARY	
Is the material that makes up the paving adequate for tha passage of people with motoric disability?	No
Are there any natural or artificial guides useful to the mobility of people with eye-sight disability?	No
Is the presence of steps signalized with elements of contrasing colours?	/
If there is a ramp, does it always have such a slope that can be walked on autonomously?	/
Are there any decorative elements and equipments useful even for persons with motoric difficulty (level at 90 cm from the ground at the most)?	Yes
Does the decorative element placed along the itinerary create an obstacle or danger?	No

Are there any fire extinguishers lodged in a cavity?	No
Is the opening at least equal to or superior to 75 cm?	Yes
Are there any visio-tactile maps?	No
Is the area supervised continuously by specialized or trained personelle at the arrival of disabled visitors?	No
NOTE: currently the excavation area cannot be visited due to work in progress.	
VERTICAL CONNECTION	
Does the visiting area spread over various levels?	No
Is there a lift or a mechanic system to overcome the difference in levels?	No
Are there any stairways?	No
If so, does the finishing of the steps present any disconnected or slippery areas?	/
Is there a tactile paving that signalizes the stairway?	/
Are there any adhesive step-markers in a sufficiently clear chromatic contrast at the end of the steps?	/
Are there any railings at 100 cm from the ground?	No
NOTA: currently the excavation area cannot be visited due to work in progress. The information refers to the area open to the public.	
SIGNANE	
Is there a clear, comprehensive and easily legible (Chromatic contrast, font, dimension, line-spacing, etc) signage?	No
Is there a clear, comprehensive and easily legible (chromatic contrast, font, dimension, line-spacing,etc.) directional signage?	No
Does the informative signage respond to the requisites of easy legibility (Chromatic contrast, font, dimension, line-spacing, etc.)?	No
Is the signage placed at a height that can be read even by persons in a sitting position?	Yes
NOTE: the signage is being re-designed.	
CONTENTS	
Are there any guided itineraries, subject to booking, done by trained personelle?	Yes
If so, who are they addressed to?	Motoric , visual, psychic disabilities and for Children
Can audio-guides be obtained in loco?	No
If not, or as an alternative, where can they be obtained?	Infopoint of PromoTurismo FVG
Is there any printing material studied for different needs?	No
Are there any special projects, cultural initiatives, didactic	Si

activities?	
EXPOSITION	
It is possible for a person with motoric disability to have access to:	The lookout with accompaniment and / or use of motorized aids
It is possible,for a person with hearing disability to have access to:	All the itinerary
It is possible for a person with eye-sight disability to have access to:	External area if accompanied
It is possible for a person with psychic disability to have access to:	External area if accompanied
What are the elements that limit physical access?	Paths not designed
Is it possible to touch the works or part of them in the presence of a staff member?	No
If so, what can be touched?	/
Is it possible to book in advance the help of a companion that can give a description or help touching the work for a tactile reading?	/
NOTE: currently the excavation area cannot be visited due to work in progress.	
SERVICES	
Is there at least one toilet with dimensions in compliance with the current regulations, that allows the entry and the necessary approach?	No
If so, is it signalled?	/
Are there any large handles?	/
Are there any seats?	Yes
If so, are they provided with back and armrests?	No
Are there any fountains or water distributors?	No
Are there any waste baskets?	Yes
NOTE: the public toilet of the complex of the Basilica can be used.	

FONDO PASQUALIS

Fig.1 Aerial view of the Pasqualis Plot. Photo by Gianluca Baronchelli taken from the web site www.aquileia.arte.it

Fondo Pasqualis is an archeological area, situated to the South of the Basilica, within which the finds of the excavations carried out between 1953 and 1954: two segments of the late-ancient surrounding walls and the areas destinated to the storehouses and the markets are exhibited.

The Internet site of Fondazione Aquileia, www.fondazioneaquileia.it, gives multi-lingual information (Italian, English, German, French, Russian) regarding the main aspects useful to the visit: opening hours, gratuitousness of the entrance and presents, together with a short historical description of the place, a video and some pictures taken from the tridimensional historical reconstruction of the site.

The area is defined at the North-West and is separated from Via dei Patriarchi by means of a metal fencing. Via dei Patriarchi is the road that takes to the gravel parking area on the South-East of the Basilica, which serves also Fondo Pasqualis. In the public parking area, the visitor can benefit from gravel stalls on payment or of a stall reserved for vehicles with the symbol for disabled people, free of charge, marked vertically and horizontally. The parking area is 90 m away from the entrance of the Fondo and it can be reached in partial safety. In fact, from the parking stall, the visitor has to cross the road which has no marked crossing points, to reach the pavement in porphyry, 100 cm

wide at the least, (in correspondence to the signage posts) that borders the Fondo. This pavement has slopes to link with the road. These correspond to the two entrances of the archeological area, (a main one and a secondary one, used for service vehicles), and others along the itinerary. The surface level doesn't always guarantee autonomous accessibility.

The main entrance, on the external part, has a slope that levels directly with those of the pavement and of the street. It can be identified by its 205 cm wide electrified metal double swing portal, with a central closing block, protruding from the cement threshold. The electrified double-doors can be opened from the inside by means of a pushbutton.

Fig.2 External view from the main entrance.

Fig.3 Internal view from the main entrance.

Fig.4 Internal view of the entrance with opening pushbutton.

Fig.5 Natural ground of the area.

Fig.6 Block composed of a step.

Fig.7 Necessity to lift up the pushchairs or prams to go beyond the obstacle.

The archeological area has a natural grassy surface. With obvious disparities, due also to the roots of the trees. It lies on a lower level as compared to that of the external pavement, and, especially in the perimetral part, it shows a deteriorating state. Inside the Fondo there is no link between the threshold and the green area, which generates a step with a riser of 4 cm followed by a descending tract in gravel and soil, delimited by metal runners fixed to the ground. These runners stick out from the ground and can be dangerously stumbled upon.

The archeological area doesn't have definite or planned itineraries. The only element that can be noted is a 990x990 cm platform, realised in recycled material with planks placed with regular formwork that generates promptly, 4 cm steps at the highest as compared to the grassy surface. This platform serves as a gathering point for groups, during the guided visits.

Fig.8 Perimetral sloping itinerary with roots.

Fig.9 Metallic runner at the entrance.

Fig.10 Plarform in recycled material.

Fig.11 Disparity of the platform in recycled material.

The excavation areas that render visible the archeological finds are at an inferior level as compared to the surface area and are defined by ademarcation of metallic pegs about 50 cm high and ropes.

Fig.12 Delimitation of the archeological finds.

Fig.13 Delimitation of the archeological finds.

In order to promote acquaintance with the area, great importance is given to the itineraries of the guided visits as there are no particular informative supports. The visitor who wants to explore the site autonomously can get information through the audio-guides that are available from the Infopoint office of PromoTurismoFVG.

The informative panel is within the area, near the entrance gate. It is a vertical self-supported panel, that contains an identifying map of the place and a brief historical description of the site. The text and the graphic contents are not completely in compliance with the requisites for an easy reading, nevertheless, the informative elements are being prepared.

Fig.14 Informative panel.

Fig.15 Detail of the informative panel.

Inside the archeological area there aren't any other informative elements to support the communication of the contents.

On the outside, the area is indicated by a directional signal containing the words: "scavi mercati" and a more recent indication, fixed on the metallic fence, with the same characteristics as those that can be seen at the other archeological areas.

As a service to the users, the site has waste bins and various cement seats of different make, around the area, in the shade of the trees.

Given the natural character of the area it must be noted that cut down trees, if any, should be tall enough to be easily visible even in the case of tall grass.

Fig.16 Directional signage.

Fig.17 Indicating signage.

Fig.18 Seats.

Fig.19 Seats.

Considerations for the improvement of accessibility

Considering the fact that the Fondo Pasqualis is situated near the Basilica, the users can benefit from the services offered there, such as the toilets and the fountains. At the moment, the autonomous physical accessibility to the site is limited as the archeological area is not provided with planned itineraries. Therefore, the visitor who needs it, must be provided with the supplementary aids for mobility on unlevelled ground with strong harshness, or a helper. This is valid for every disabled person, according to the grade of disability.

In order to improve accessibility for disabled visitors it could be useful to:

1) complete the Internet site with contents useful to mobility and to the visitors' knowledge of the place, inserting new tools and a Service Card. At present, it would be functional to indicate the peculiar natural character of the area and the necessity to use aids dedicated to a mobility on rough natural ground, and/or a help;

2) improve the pedestrian crossing and the mobility to guarantee to every visitor a safe transit in Via dei Patriarchi and the possibility to reach the site. The first thing to criticise is the lack of a connection between the existing parking area and the pedestrian pavement that delimits Fondo Pasqualis. This is a mixed itinerary, that is, the visitors who can't enter the raised green area, for the first portion of the itinerary, have to cross a road accessible to vehicles. It is therefore indispensable to guarantee an improvement, in terms of safety, of the pedestrian crossing with the planning of a connection between the parking site and the crossing point that should be defined and signalled. A possible intervention to guarantee accessibility could consist in the realisation of a pedestrian path, in the green area, adjacent to the gravel parking area that connects the short-stop stall dedicated to the path that takes to the Basilica. Approximately half way along this path, a pedestrian lane could be planned, with tacto-plantar signage, in conformity with the connecting double slope already present on the facing pavement. This intervention should be established with the competent authorities;

3) evaluate a tactilo-plantar solution, put on the porphyry paving in correspondence to the entrance portal to the area, that permits blind visitors to identify the service;
4) evaluate the replacement of the metallic gate with one without protruding blocks on the floor;
5) guarantee the access to the area, linking the threshold to the internal itinerary, considering the compactness of the material and the slope to be limited as much as possible and within the limit of 8%;
6) improve the acessibility of the area, defining itineraries provided with a landform that doesn't hinder mobility. A solution could be found in the realisation of a path in stabilised gravel, in compliance with the natural character of the site. Another solution could be the definition of itineraries with grid panels. The planned itineraries should guarantee the identification of the limits. In any case, the planning should evaluate the altimetric development in order to reduce the slopes to the least possible;
7) evaluate the insertion of a more stable delimitation of the excavating area to render it safe and easily perceptible especially to visitors with eye sight disability. The present natural character of the area could be completed with pegs and ropes with a metallic band along the path, identifiable with the white walking stick both by contact and sound;
8) in the new plan of the signage consider the compliance with the standards that guarantee an easy reading (compliance with the requisites of visibility, chromatic contrast, type of lettering and relative height, etc.), evaluate the insertion of data in relation to the distances to other visitable sites, a contact number for emergencies, qr-code to obtain connections with videos, 3d reconstructions, videos in sign language and/or captions and to consult the panel with enlarged letters;
9) consider the insertion of a visuo-tactile map explicatory of the organisation of the Fondo and of the position of the finds, to be placed within the area near the entrance doors, with appropriate chromatic contrast, written in relief and in braille;
10) while organising the itineraries, consider the position of seats, allowing useful freespaces for pushchairs and wheelchairs;
11) evaluate the insertion of integrative elements to the seats that render them more functional and ergonomic;
12) evaluate, in proximity of the footplate, the provision of a raised platform for the guide to be in an elevated position to be more visible to the visitors. This element could help, above all, deaf people to follow better the explanations through lip and gestual reading.

Summarizing Data Sheet

Here follows an elaborated summarizing diagram based on the analysis made and on the example produced by Associazione Tetra - Paraplegics F.V.G. O.n.l.u.s. for the web site: www.turismoaccessibile.fvg.it .

PARKING SITE	
Is there a parking site reserved for a disabled person near the visiting site?	Yes
Is there a stop for route buses near the entrance of the place to be visited?	No
Is there a planned pedestrian lane that, even if accompanied, permits a direct connection of the parking site to the entrance of the place to be visited?	No
Is the ground suitable for the transit of people with d motoric disability?	No
Are there natural or artificial guides useful to the mobility of people with eye-sight problems?	No
ACCESS	
The area in front and at the back of the entrance is coplanar or does it have such a slope as to be accessible?	No
Is the finishing of the paving correspondent to the access homogeneous?	Yes
Are there any elements that stick out of the limits of the paving (doormats, grids or closing pivots, etc.)?	Yes
Is there any difference in height at the entrance point?	Yes
Is there an access ramp or a sloping lane?	Yes
The access to the area is through:	An open metal door
Are there any other facilitations to the physical access?	No
INTERNAL ITINERARY	
Is the material that makes up the paving adequate for tha passage of people with motoric disability?	No
Are there any natural or artificial guides useful to the mobility of people with eye-sight disability?	No
Is the presence of steps signalized with elements of contrasing colours?	/
If there is a ramp, does it always have such a slope that can be walked on autonomously?	/

Are there any decorative elements and equipments useful even for persons with motoric difficulty (level at 90 cm from the ground at the most)?	No
Does the decorative element placed along the itinerary create an obstacle or danger?	No
Are there any fire extinguishers lodged in a cavity?	No
Is the opening at least equal to or superior to 75 cm ?	Yes
Are there any visio-tactile maps?	No
Is the area supervised continuously by specialized or trained personelle at the arrival of disabled visitors?	No
VERTICAL CONNECTION	
Does the visiting area spread over various levels?	No
Is there a lift or a mechanic system to overcome the difference in levels?	/
Are there any stairways?	/
If so, does the finishing of the steps present any disconnected or slippery areas?	/
Is there a tactile paving that signalizes the stairway?	/
Are there any adhesive step-markers in a sufficiently clear chromatic contrast at the end of the steps?	/
Are there any railings at 100cm from the ground?	/
SIGNANE	
Is there a clear, comprehensive and easily legible (Chromatic contrast, font, dimension, line-spacing, etc) signage?	No
Is there a clear, comprehensive and easily legible (chromatic contrast, font, dimension, line-spacing,etc.) directional signage?	No
Does the informative signage respond to the requisites of easy legibility (Chromatic contrast, font, dimension, line-spacing, etc.)?	No
Is the signage placed at a height that can be read even by persons in a sitting position?	Yes
NOTE: the signage is being re-designed.	
CONTENTS	
Are there any guided itineraries, subject to booking, done by trained personelle?	Yes
If so, who are they addressed to?	Motoric , visual, psychic disabilities and for Children
Can audio-guides be obtained in loco?	No
If not, or as an alternative, where can they be obtained?	Infopoint of PromoTurismo FVG

Is there any printing material studied for different needs?	No
Are there any special projects, cultural initiatives, didactic activities?	Si
EXPOSITION	
It is possible for a person with motoric disability to have access to:	The lookout with accompaniment and / or use of motorized aids
It is possible,for a person with hearing disability to have access to:	All the itinerary
It is possible for a person with eye-sight disability to have access to:	All the itinerary if accompanied
It is possible for a person with psychic disability to have access to:	All the itinerary if accompanied
What are the elements that limit physical access?	Presence of ground in grass and gravel
Is it possible to touch the works or part of them in the presence of a staff member?	No
If so, what can be touched?	/
Is it possible to book in advance the help of a companion that can give a description or help touching the work for a tactile reading?	Yes
SERVICES	
Is there at least one toilet with dimensions in compliance with the current regulations, that allows the entry and the necessary approach?	No
If so, is it signalled?	/
Are there any large handles?	/
Are there any seats?	Yes
If so, are they provided with back and armrests?	No
Are there any fountains or water distributors?	No
Are there any waste baskets?	Yes
NOTE: the public toilet of the complex of the Basilica can be used.	

ROMAN FORUM

Fig. 1 View of the East archeologic area of the Roman Forum.

The Roman Forum is the only archeological area in Aquileia divided in two sections, one to the East and one to the West of Via Julia Augusta. The Roman Forum, that at the moment is divided and enclosed by a metallic mesh, used to be the nerve centre of the political, administrative and social city life.

The Internet site of Fondazione Aquileia, www.fondazioneaquileia.it, supplies information regarding the principal elements useful to the visit, together with a brief historical description of the place, videos and images of the evocative tridimensional reconstruction of what must have been the original aspect of the site.

The area of the Roman Forum is in a passing position, visible from the public road that crosses it, at a lower level of about 2 m as compared to today's ground level.

The nearest parking area is at a distance of about 200 m from the entrance gate, along Via Gemina, and is dedicated exclusively to motorcars. Parking is free, without signalled stalls, the ground is gravel-covered and the driveway is divided by an asphalted pedestrian path, 11 cm higher as compared to the driveway itself. This path is connected to the cycling lane with an unprotected stretch, not perfectly coplanar as compared to the public road. The crossing of Via

Gemina connected with the cycling lane, consequently, it is a mixed passage. It doesn't present any obstacles given the coplanarity of the the paths to the North of the street and the presence of ramps connecting the pavement to the South that runs along the Roman Forum.

Fig.2 Connection between he pedestrian walkway and the cycling lane.

Fig.3 Cycling lane used as a pedestrian lane.

Another parking area, that, contrary to the first doesn't limit the access to specific typologies of vehicles, is the one near the Infopoint. For the description of this parking area refer to the specific sheet on Infopoint.

For both areas, the shortest way without obstacles to reach the entrance of the Foro, and more specifically, the one in the East section, is that of the 260 cm wide double-aisle cycling lane, with a homogeneous ground which obviously provokes the critical issue of the mix with the passing of bicycles. As an alternative, the itinerary can become slightly longer, using the pavements. In this case, the immediate critical issue that could be met with, is determined by the imperfect connections with the road. The pavements have variabe widths, between 198 and 130 cm and ramps for the connection of the levels in correspondence with the pedestrian crossings and the entrance to the Roman Forum.

Fig.4 Stretch of cycling lane flanking the Roman Forum.

Fig.5 Stretch of pavement flanking the Roman Forum.

Near the archeological area, the cycling lane and the pavements are connected by a 400 cm gravel path, that flanks the mesh that delimits the site and takes to the entrance gate. The area is pointed out by an identifying panel placed on the gate that, on account of this, it is not visible when the gate is open. The entrance takes place through a non-electrified metallic double-hinged door, 260 cm wide that has a central stone block fixed to the ground to stop the gate when closed. This could become a stumbling block.

Fig.6 Gravel path connecting the cycling lane to the pavement.

Fig.7 Entrance Gate of the Roman Forum.

Fig.8 Belvedere with railing.

Fig.9 Gravel path inside the Roman Forum.

From here the visitors can reach the East section of the Roman Forum that initially has an area in natural ground with not homogeneous altimetric articulation, especially in the part where there is one of the information panels. This welcome space provides, towards West, a 10.90x5.30m panoramic view that overlooks the archeological finds. Besides, from the entrance, a straight path in gravel, 55.30 m long and 140 cm wide, begins, which for the first 5 m presents a discending trend with a slope of about 6%. This takes the visitor to the innermost accessible part. Therefore we understand that the area destined for the visitors, that is higher than the finds, has an “L” form and is delimited, in the innermost part near the excavating area, by a wooden railing 100 cm high, not always perpendicular to the trampling ground. Some planted green zones and a metallic mesh fence surround the area. The Eastern archeologic area is artificially lit to render the ruins visible even at night. This lighting doesn't affect the paths.

The west section can be reached by crossing Via Giulia Augusta and can be seen exclusively from the outside as there are no access points.

The pedestrian crossing is provided, on both sides, with ramps that link its level with the roadway.

Fig.10 Pedestrian crossing.

Fig.11 Pavement of the West area of the Roman Forum.

Fig.12 Delimitation in mesh of the Western area of the Roman Forum.

Fig.13 Delimitation in mesh of the Western area of the Roman Forum.

Fig.14 West area of the Roman Forum.

Fig.15 Information panel of the East area of the Forum.

Fig.16 Information panel of the Eastern area of the Roman Forum.

Fig.17 Information panel of the Eastern area of the Roman Forum.

In both areas of the Roman Forum there are information panels placed inside the fence that, even if in wide mesh, acts as a barrier for the visitor. Both in the Eastern and in the Western sections the information panels are in part ruined and not easily legible. In the Eastern area, placed at an angle, there is the most recent information panel. This is easier to read, because it is less ruined and much simpler in its contents. However, attention must be drawn to the fact that some contents are difficult to understand. In fact, as it has already been hinted at in the other sheets, it is not completely in compliance with the requisites for easy reading.
An additional service is given by the presence of waste baskets. The Knowledge of the area can be deepened through the booking of guided visits or, autonomously, through the use of the audioguides available at the Infopoint.

Considerations for the improvement of accessibility
At the moment, physical accessibility to the site is solved by a planning approach that favours "the view on heritage". Some interventions could be performed to improve the relation between the heritage and the user and to guarantee accessibility to people with disabilities. For this purpose, these actions can be taken into consideration:
1) complete the Internet site with contents useful to the mobility and to the knowledge of the place by inserting new tools and a Service Card. At present, it would be useful to indicate the natural character of the area, the necessity of a visit with a helper or the use of convenient aids;
2) evaluate interventions for the accessibility of the site in agreement with the authorities in charge. Evaluate the completion of the cycling lane with a pedestrian path and plan the arrangement of rhe section that gives access to the Roman Forum and links the cycling lane to the opposite pavement, in order to render it homogeneous. Evaluate the insertion of a tactilo-plantar sign placed in correspondence with the pedestrian crossings and the cycling lane and potential immediate protections;
3) evaluate the insertion of a tactilo-plantar sign in correspondence with the entrance gate of the area to permit the identification of the service by blind visitors;
4) carry out new suitable arguments with the authorities in charge on the itinerary of the visit and on the view of the area;
5) evaluate the insertion of a drinking fountain in the external part near the cycling lane, possibly usable on two levels;
6) evaluate the insertion of seats, even with seatbacks, armrests and ischiaric supports, inside the area, placed in a way to permit a comfortable contemplation of the site and the consultation of possible descriptive panels. Evaluate the number of seats, keeping in mind the tourist flow and their location in the shade;
7) improve the accessibility of the gravel path that is inside the area, planning solutions that maintain its natural character, but that are more stable. The planning should consider also the

altimetric development in order to reduce to the minimum the slopes and render identifiable its margins;

8) in the new planning of the signage consider the compliance with the standards that guarantee an easy reading as already indicated in the previous sheets. Evaluate even the positioning in loco to render it approachable by the visitors and without any barriers;

9) evaluate the insertion of a visuo-tactile map with suitable chromatic contrast to be put inside the area, with writings in relief and in braille;

10) evaluate the predisposition of accessible audio-descriptive itineraries.

Summarizing Data Sheet

Here follows an elaborated summarizing diagram based on the analysis made and on the example produced by Associazione Tetra - Paraplegics F.V.G. O.n.l.u.s. for the web site: www.turismoaccessibile.fvg.it.

PARKING SITE	
Is there a parking site reserved for a disabled person near the visiting site?	No
Is there a stop for route buses near the entrance of the place to be visited?	No
Is there a planned pedestrian lane that, even if accompanied, permits a direct connection of the parking site to the entrance of the place to be visited?	Yes
Is the ground suitable for the transit of people with d motoric disability?	No
Are there natural or artificial guides useful to the mobility of people with eye-sight problems?	No
NOTE: reference is made to the parking in via Gemina.	
ACCESS	
The area in front and at the back of the entrance is coplanar or does it have such a slope as to be accessible?	Yes
Is the finishing of the paving correspondent to the access homogeneous?	No
Are there any elements that stick out of the limits of the paving (doormats, grids or closing pivots, etc.)?	Yes
Is there any difference in height at the entrance point?	No
Is there an access ramp or a sloping lane?	No
The access to the area is through:	An open metal door
Are there any other facilitations to the physical access?	No

INTERNAL ITINERARY	
Is the material that makes up the paving adequate for tha passage of people with motoric disability?	No
Are there any natural or artificial guides useful to the mobility of people with eye-sight disability?	Yes
Is the presence of steps signalized with elements of contrasing colours?	/
If there is a ramp, does it always have such a slope that can be walked on autonomously?	Yes
Are there any decorative elements and equipments useful even for persons with motoric difficulty (level at 90 cm from the ground at the most)?	No
Does the decorative element placed along the itinerary create an obstacle or danger?	No
Are there any fire extinguishers lodged in a cavity?	No
Is the opening at least equal to or superior to 75 cm?	Yes
Are there any visio-tactile maps?	No
Is the area supervised continuously by specialized or trained personelle at the arrival of disabled visitors?	No
VERTICAL CONNECTION	
Does the visiting area spread over various levels?	Yes
Is there a lift or a mechanic system to overcome the difference in levels?	No
Are there any stairways?	No
If so, does the finishing of the steps present any disconnected or slippery areas?	/
Is there a tactile paving that signalizes the stairway?	/
Are there any adhesive step-markers in a sufficiently clear chromatic contrast at the end of the steps?	/
Are there any railings at 100 cm from the ground?	Yes
SIGNANE	
Is there a clear, comprehensive and easily legible (Chromatic contrast, font, dimension, line-spacing, etc) signage?	No
Is there a clear, comprehensive and easily legible (chromatic contrast, font, dimension, line-spacing,etc.) directional signage?	No
Does the informative signage respond to the requisites of easy legibility (Chromatic contrast, font, dimension, line-spacing, etc.)?	No
Is the signage placed at a height that can be read even by persons in a sitting position?	Yes
NOTE: the signage is being re-designed.	

CONTENTS	
Are there any guided itineraries, subject to booking, done by trained personelle?	Yes
If so, who are they addressed to?	Motoric , visual, psychic disabilities and for Children
Can audio-guides be obtained in loco?	No
If not, or as an alternative, where can they be obtained?	Infopoint of PromoTurismo FVG
Is there any printing material studied for different needs?	No
Are there any special projects, cultural initiatives, didactic activities?	Si
EXPOSITION	
It is possible for a person with motoric disability to have access to:	The lookout with accompaniment and / or use of motorized aids
It is possible,for a person with hearing disability to have access to:	All the itinerary
It is possible for a person with eye-sight disability to have access to:	All the itinerary if accompanied
It is possible for a person with psychic disability to have access to:	All the itinerary if accompanied
What are the elements that limit physical access?	Presence of ground in grass and gravel
Is it possible to touch the works or part of them in the presence of a staff member?	No
If so, what can be touched?	/
Is it possible to book in advance the help of a companion that can give a description or help touching the work for a tactile reading?	Yes
SERVICES	
Is there at least one toilet with dimensions in compliance with the current regulations, that allows the entry and the necessary approach?	No
If so, is it signalled?	/
Are there any large handles?	/
Are there any seats?	No
If so, are they provided with back and armrests?	/
Are there any fountains or water distributors?	No
Are there any waste baskets?	Yes

RIVER PORT AND SACRED WAY

Fig.1 View on the finds of the River Port.

The archeological area of the River Port is situated to the East of the Foro, and it is delimited to the North by Via Gemina and to the South by the cycling lane.

The River Port is an example of a port structure of Roman times, restructured at the beginning of the first centuryAD and later transformed in the time of Constantine the Great (306-337 AD).

The Sacred Way is the archeological walk, realised in the 1930s. It is situated between the River port and the area of the Basilica. This is shaded by cipress trees planted all along the limits of the walk.

On the Internet site of Fondazione Aquileia, www.fondazioneaquileia.it, as for the other archeological areas, there is the main information useful to the visit: opening hours, free entry, together with a brief historical description of the place, videos and images of the evocative three dimensional reconstruction of what must have been the original aspect of the site.

The access to the Sacred Way is dual. It can take place from the main entrance, through an arched portal overlooking Via Gemina or from a secondary entrance more internal, that faces the cycling lane.

Fig.2 Main entrance.

Fig.3 Secondary entrance and exit.

Fig.4 Main Entrance Square.

Fig.5 Pedestrian crossing with a tactilo-plantar loges.

Fig.6 Seats.

Fig.7 Flower-beds with seats.

In front of the main entrance, defined by an arch made of bricks, there is a square with homogeneous stone paving, alternated by flower-beds near which there are seats of various heights.
The secondary entrance, or exit, has only a simple metal doorway.
Due to its proximity to the site, the space between the archeological area of Via Gemina and the public road is used as a stop for cars, even if it is not specified as a parking site yet. The recent interventions on the arrangement of the square in front of the entrance to the archeological area have prepared a pedestrian crossing that links the car-stop area indicated above with the square, including tactilo-plantar elements that conduct the visitor up to the natural guide of the city wall.

Fig.8 Pavement in porphyry with slopes.

Fig.9 Really dangerous pavement with tactilo-plantar sign.

Along the itinerary, in correspondence with the end of the area of a new design intervention of the square of the River Port, there is a tactilo-plantar sign with the code: "absolute danger", placed in the wrong place. This may transmit the wrong information to blind people.
The entrance to the area can be identified by a double-hinged metal gate, 288 cm wide. This gives access to a gravel path 550 m long and 280 cm wide, with a homogeneous altimetric trend, delimited by a line of cypress trees on both sides. For the most of its extension it doesn't have any protective elements in relation to the lateral difference in height as compared to the archeological finds. The railings are inserted exactly in correspondence with the cement stairs downhill towards the platforms, or on the wooden bridge crossings where they reach the height of 100 cm.
Along the itinerary, there are stony archeological finds that are different in their use and in their dimensions. Worthy of notice is the presence of a frieze coming from the Roman Forum, placed on a structure in steel profiles and brick elements, specifically made to permit the contemplation of the frieze from below, such as its architectural nature and other constructive and decorative elements.

Fig.10 Gravel path inside the archeologic area.

Fig.11 Finds exposed along the itinerary.

Fig.12 Railings in correspondence with the cement stairs.

Fig.13 Bridge crossing.

Fig.14 Practicability for visitors on wheelchair through the

Fig.15 Fixing of triride to the wheelchair.

The informative descriptive panel of the area is situated inside the site near the main enrance. It has the same characteristics of the other similar panels. It must be noted that the metal railing that

encloses the area creates a barrier between the area and the visitor, consequently, it interferes with the reading. Along the path there are other informative panels on metallic support, fixed to the ground, with a sloped surface at 70 cm at the least with textual contents and graphics not easily to read, particularly for their age and their degradation due to their long exposition to an external environment. Great importance is being given to the itineraries of guided visits for a good knowledge of the area. The user who would like to explore the site autonomously can obtain information through the use of audio-guides available at the Infopoint office of PromoTurismoFVG.

Fig.16 Informative panel describing the area.

Fig.17 Descriptive panel on a sloped surface.

As mentioned above, inside the archeological area there aren't any other informative elements to support the contents on the site and the only additional services are the rubbish bins and some stone benches. Visitors use also some of the exposed finds as seating accomodations.

Considerations for the improvement of the accessibility

Considering the fact that the River Port and the Sacred Way are situated at a short distance from the Basilica, the users may use the same services pertaining to it, such as the toilets, whereas in the vicinity, the installation of a drinking fountain may be provided for.

In order to improve the accessibility for disabled visitors, it could be useful to:

1) complete the Internet site with contents useful to mobility and to the knowledge of the place, by means of the insertion of new tools and a Service Card. At present it would be suitable to indicate the natural character of the itineraries, the necessity of the use of aids dedicated to mobility on a not homogeneous natural ground and/or an accompanied visit;

2) evaluate the regularisation of the car stops in the area overlooking the Fondo in Via Gemina prearranging stalls reserved for cars marked with the symbol for disabled people with enough space to get in and out of the vehicles, placed at rhe immediate vicinity of the pedestrian crossing.

Given the closeness of the public street, it would be convenient to evaluate the placing of the stalls, guaranteeing a safe and protected pedestrian path;

3) evaluate the insertion of a tactilo-plantar sign that permits the recognition of the cycling lane by blind visitors;

4) evaluate the insertion of a tactilo-plantar sign on the external paving of the square in correspondence with the entrance gate of the area, that permits the identification of the service by blind visitors;

5) consider putting a drinking fountain, possibly on two levels, in correspondece with the secondary entrance so that it may be used also by cyclists passing on the cycling lane;

6) improve the accessibility of the gravel path by planning solutions that maintain the natural character, while rendering them steadier. The design should evaluate also the necessity of planning itineraries that permit visitors to locate the edges;

7) in the new planning of the signage, consider the observance of the standards that guarantee an easy reading as already indicated in the previous sheets, and evaluate accurately the position on site;

8) evaluate the insertion of a visuo-tactile map with suitable chromatic contrast to be placed near the link with the cycling lane, with writing in relief and in braille so that it will attract also the curiosity of cycling tourists and guide them to the archeological site.

9) evaluate the realisation of supports to the archeological finds that, at the moment, are placed on the ground to render them more accessible to haptic exploration. It may be useful to complete the elements exposed with captions;

10) consider the insertion of seats and ischiatic supports, keeping in mind the number and the placing also in terms of the panoramic viewpoints;

11) evaluate the predisposition of the audio-descriptive itineraries accessible.

Summarizing Data Sheet

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PARKING SITE	
Is there a parking site reserved for a disabled person near the visiting site?	No
Is there a stop for route buses near the entrance of the place to be visited?	Yes
Is there a planned pedestrian lane that, even if accompanied, permits a direct connection of the parking site to the entrance of the	Yes

place to be visited?	
Is the ground suitable for the transit of people with d motoric disability?	No
Are there natural or artificial guides useful to the mobility of people with eye-sight problems?	No
ACCESS	
The area in front and at the back of the entrance is coplanar or does it have such a slope as to be accessible?	Yes
Is the finishing of the paving correspondent to the access homogeneous?	Yes
Are there any elements that stick out of the limits of the paving (doormats, grids or closing pivots, etc.)?	Yes
Is there any difference in height at the entrance point?	No
Is there an access ramp or a sloping lane?	No
The access to the area is through:	An open metal door
Are there any other facilitations to the physical access?	No
INTERNAL ITINERARY	
Is the material that makes up the paving adequate for tha passage of people with motoric disability?	No
Are there any natural or artificial guides useful to the mobility of people with eye-sight disability?	No
Is the presence of steps signalized with elements of contrasing colours?	/
If there is a ramp, does it always have such a slope that can be walked on autonomously?	/
Are there any decorative elements and equipments useful even for persons with motoric difficulty (level at 90 cm from the ground at the most)?	Yes
Does the decorative element placed along the itinerary create an obstacle or danger?	No
Are there any fire extinguishers lodged in a cavity?	No
Is the opening at least equal to or superior to 75 cm?	Yes
Are there any visio-tactile maps?	No
Is the area supervised continuously by specialized or trained personelle at the arrival of disabled visitors?	No
VERTICAL CONNECTION	
Does the visiting area spread over various levels?	No
Is there a lift or a mechanic system to overcome the difference in levels?	No
Are there any stairways?	No
If so, does the finishing of the steps present any disconnected or slippery areas?	/

Is there a tactile paving that signalizes the stairway?	/
Are there any adhesive step-markers in a sufficiently clear chromatic contrast at the end of the steps?	/
Are there any railings at 100 cm from the ground?	/
SIGNANE	
Is there a clear, comprehensive and easily legible (Chromatic contrast, font, dimension, line-spacing, etc) signage?	No
Is there a clear, comprehensive and easily legible (chromatic contrast, font, dimension, line-spacing,etc.) directional signage?	No
Does the informative signage respond to the requisites of easy legibility (Chromatic contrast, font, dimension, line-spacing, etc.)?	No
Is the signage placed at a height that can be read even by persons in a sitting position?	Yes
NOTE: the signage is being re-designed.	
CONTENTS	
Are there any guided itineraries, subject to booking, done by trained personelle?	Yes
If so, who are they addressed to?	Motoric , visual, psychic disabilities and for Children
Can audio-guides be obtained in loco?	No
If not, or as an alternative, where can they be obtained?	Infopoint of PromoTurismo FVG
Is there any printing material studied for different needs?	No
Are there any special projects, cultural initiatives, didactic activities?	Si
EXPOSITION	
It is possible for a person with motoric disability to have access to:	The lookout with accompaniment and / or use of motorized aids
It is possible,for a person with hearing disability to have access to:	All the itinerary
It is possible for a person with eye-sight disability to have access to:	All the itinerary if accompanied
It is possible for a person with psychic disability to have access to:	All the itinerary if accompanied
What are the elements that limit physical access?	Presence of gravel background
Is it possible to touch the works or part of them in the presence of a staff member?	Yes
If so, what can be touched?	Evidences placed along the route
Is it possible to book in advance the help of a companion that can give a description or help touching the work for a tactile reading?	Yes
SERVICES	
Is there at least one toilet with dimensions in compliance with the current regulations, that allows the entry and the necessary approach?	No
If so, is it signalled?	/

Are there any large handles?	/
Are there any seats?	Yes
If so, are they provided with back and armrests?	No
Are there any fountains or water distributors?	No
Are there any waste baskets?	Yes

NECROPOLIS

Fig.1 A view of the Necropolis.

The Necropolis is an archeological zone situated in the West of the town, surrounded by cultivated areas and residential lots. At present, it is the only section of the necropolis of Aquileia open to the public. It is composed of five funerary enclosures.

The Internet site of Fondazione Aquileia, www.fondazioneaquileia.it, gives multilingual information regarding the main aspects useful to the visitor: opening hours, free entrance and presents, together with a brief historical description of the place, videos and pictures of the evocative tridimensional reconstruction of what must have been the original aspect of the site.

The Necropolis zone lies in an internal piece of land in relation to the public road, and can be reached through a single pedestrian access. The nearest parking lots are along Via Livia or in Piazza San Giovanni, 100 and 200 m away from the entrance to the touring area respectively.

Along Via XXIV Maggio there is a small paved square with private buildings and the entrance to the archeological area. The latter, signalized by an information panel, can be identified by an electrified two-wing metal front door, 152 cm wide, which leads to a gravel path 50 m, long and 250 cm wide, altimetrically irregular, with artificial lights embedded in the paving and perfectly at level with it. The path is delimited on both sides: on one side by a stone and brick wall and by a

metal net on the other. These demarcations are the confines of the property and form a safe guide to visitors with eye-sight problems, who can find a natural reference point right from the outside.
As far as the gravel path is concerned, its first 8m present a slight 2% rise, then it goes on coplanar up to the last tract, where for 7 m, the paving degrades by 6% until it reaches the panoramic view. This 210 by 320 cm view is the partially accessible point[19] from where the archeological site can be seen. If the path hadn't put in evidence a ditching problem given by the gravel stones, the paved path from the square, up to the panoramic viewpoint would have been accessible to everyone autonomously, thanks to the presence of the natural reference points for visitors with eye-sight problems and to the perfect correspondence of the levels.

Fig.2 Paved square not accessible to the public.

Fig.3 A gravel-paved path that takes to the archeological area.

From the panoramic point a path, structured on various levels, that encloses the archeological finds and permits a 360° view can be noticed. From here, two flights of stone steps, 146 cm wide, goes down to the finds which are flanked on two sides by a passage way in gravel stones, delimited by the funerary enclosures and by the 195 cm high containment stone walls of the grassy escarpments. Then the itinerary proceeds on another two levels of complete perimeter fence of the finds. On the West side, the level path in gravel is followed by six stone steps 130 cm large, with a railing on a single side and conjoins a 20 m long and 128 cm wide boardwalk with a wooden railing and gravel paving. The itinerary continues on a turfed footpath without any protection, arriving at the highest panoramic point that overlooks the area. This last tract has a strong natural character and a non-homogeneous layout. The only distnguishable planned anthropic element is given by the lights that emerge from the turf. The presence of an artificial illumination makes it possible to visit the area in the evening.

19 The access is conditioned by the presence of a helper or by aids for movements on unstable non-compact ground.

Fig.4 Stone stairway going down to the archeological area.

Fig.5 A gravel path levelled with the finds.

Fig.6 Stone stairway going up to the pedestrian path.

Fig.7 Gravel pedestrian path.

Fig.8 An ascending tract on a turfed slope.

Fig.9 A descending tract on a turfed declivity.

In order to get to know the area well, a great importance is given to the guided visits as there isn't much informative backing on the place. The user who would like to visit the site autonomously can

receive information through the use of the audioguides procurable at the Infopoint office of PromoTurismoFVG. On the place, the only informative panel is near the entrance gate, indicating the same characteristics and faults of the site already described in the previous sheets.

Fig.10 Informative panel.

Fig.11 Informative panel.

Inside the archeological area there aren't any other informative elements and the only additional services are the waste baskets. However, it is observed that the visitors use the low stone and brick walls that delimit the funerary enclosures or prefer the turfed escarpments to sit on.

Considerations for the improvement of the accessibility

Considering that the Necropolis is the archeological area more to the West and isolated, it needs specific attention.

The physical access to the Necropolis is complex, as the archeological area, in its modest dimensions and visit circuit, lies on an inferior level in relation to the present planking level that privileges “the view on the heritage”, in this specific case, proves to be positive, as it is precisely from the elevated position that this site can be best appreciated. However, something should be done to guarantee a better accessibility for disabled visitors.

It might be useful:

1) to integrate the Internet website with the contents useful to the mobility and to the knowledge of the place, inserting new instruments and a Service Card as described in the introduction. At the present state it is necsesary to indicate the existent faults, the necessity of assistance or the use of aids for the purpose;

2) to evaluate, in agreement with the local authorities, a parking lot for the vehicles in the immediate proximity of the entrance to the area. The lack of accessable pedestrian walkways, that connect the existent parking lots to the entrance of the Necropolis, require a planning of a stall for

temporary stops in the above-mentioned square (only to let the accompanied passengers on and off the vehicles) or for vehicles tagged for disabled persons;
3) plan tactilo-plantar signals on the tiled square, corresponding to the entrance door to the area, that permits the identification of the service by blind visitors;
4) evaluate the insertion on the external neutral ground, a fountain with drinkable water, possibly usable on two levels;
5) improve the accessibility of the gravel paths, finding solutions that respect their natural character, but that are steadier. The planning should evaluate also the altimetric development in order to reduce to minimum the sloping degrees of the paths;
6) improve the perception of the steps, especially while going down, inserting step markers in a strong contrasting colour;
7) make a new plan for the informative signalization to render it clearer and more comprehensive for everybody (compliant with the requisites of visibility, chromatic contrast, type of character and relative height etc.), including data in relation to the distance between one point of view and another, a telephone number for emergencies, qr-code to be able to obtain connections with extra contents, 3D reconstructions, videos in sign language with subtitles, as well as to make it possible to consult the contents of the panel in larger print;
8) plan a video-tactile map describing the place, with appropriate chromatic contrast to put on the panoramic point of view, in letterpress and braille;
9) from the point of view of the expansion of the visit circuit in relation to other neighbouring areas, an improvement of the physical accessibility to the various levels could be taken into consideration with the planning of new solutions to solve the problem of uneven levels;
10) evaluate the preparation of accessible audio-description paths.

Summarizing Data Sheet

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PARKING SITE	
Is there a parking site reserved for a disabled person near the visiting site?	No
Is there a stop for route buses near the entrance of the place to be visited?	No
Is there a planned pedestrian lane that, even if accompanied, permits a direct connection of the parking site to the entrance of	No

the place to be visited?	
Is the ground suitable for the transit of people with d motoric disability?	/
Are there natural or artificial guides useful to the mobility of people with eye-sight problems?	/
ACCESS	
The area in front and at the back of the entrance is coplanar or does it have such a slope as to be accessible?	Yes
Is the finishing of the paving correspondent to the access homogeneous?	Yes
Are there any elements that stick out of the limits of the paving (doormats, grids or closing pivots, etc.)?	No
Is there any difference in height at the entrance point?	No
Is there an access ramp or a sloping lane?	Yes
The access to the area is through:	An open metal door
Are there any other facilitations to the physical access?	No
INTERNAL ITINERARY	
Is the material that makes up the paving adequate for tha passage of people with motoric disability?	No
Are there any natural or artificial guides useful to the mobility of people with eye-sight disability?	Yes
Is the presence of steps signalized with elements of contrasing colours?	No
If there is a ramp, does it always have such a slope that can be walked on autonomously?	Yes
Are there any decorative elements and equipments useful even for persons with motoric difficulty (level at 90 cm from the ground at the most)?	No
Does the decorative element placed along the itinerary create an obstacle or danger?	No
Are there any fire extinguishers lodged in a cavity?	No
Is the opening at least equal to or superior to 75 cm?	Yes
Are there any visio-tactile maps?	No
Is the area supervised continuously by specialized or trained personelle at the arrival of disabled visitors?	No
VERTICAL CONNECTION	
Does the visiting area spread over various levels?	Yes
Is there a lift or a mechanic system to overcome the difference in	No

levels?	
Are there any stairways?	Yes
If so, does the finishing of the steps present any disconnected or slippery areas?	No
Is there a tactile paving that signalizes the stairway?	No
Are there any adhesive step-markers in a sufficiently clear chromatic contrast at the end of the steps?	No
Are there any railings at 100 cm from the ground?	Yes
SIGNANE	
Is there a clear, comprehensive and easily legible (Chromatic contrast, font, dimension, line-spacing, etc) signage?	No
Is there a clear, comprehensive and easily legible (chromatic contrast, font, dimension, line-spacing,etc.) directional signage?	No
Does the informative signage respond to the requisites of easy legibility (Chromatic contrast, font, dimension, line-spacing, etc.)?	No
Is the signage placed at a height that can be read even by persons in a sitting position?	Yes
NOTE: the signage is being re-designed.	
CONTENTS	
Are there any guided itineraries, subject to booking, done by trained personelle?	Yes
If so, who are they addressed to?	Motoric , visual, psychic disabilities and for Children
Can audio-guides be obtained in loco?	No
If not, or as an alternative, where can they be obtained?	Infopoint of PromoTurismo FVG
Is there any printing material studied for different needs?	No
Are there any special projects, cultural initiatives, didactic activities?	Yes
EXPOSITION	
It is possible for a person with motoric disability to have access to:	The lookout with accompaniment and / or use of motorized aids
It is possible,for a person with hearing disability to have access to:	All the itinerary
It is possible for a person with eye-sight disability to have access to:	All the itinerary if accompanied
It is possible for a person with psychic disability to have access to:	All the itinerary if accompanied

What are the elements that limit physical access?	Gravel bottom and stairs without color contrast elements
Is it possible to touch the works or part of them in the presence of a staff member?	Yes
If so, what can be touched?	The funerary fences
Is it possible to book in advance the help of a companion that can give a description or help touching the work for a tactile reading?	Yes
SERVICES	
Is there at least one toilet with dimensions in compliance with the current regulations, that allows the entry and the necessary approach?	No
If so, is it signalled?	/
Are there any large handles?	/
Are there any seats?	No
If so, are they provided with back and armrests?	/
Are there any fountains or water distributors?	No
Are there any waste baskets?	Yes

NATIONAL ARCHEOLOGICAL MUSEUM

Fig.1 Part of the expository itinerary of the National Archeological Museum of Aquileia.

The National Archeological Museum of Aquileia (MAN) lies immediately to the West of Via Julia Augusta, with Via Roma and Via Curiel to the North and to the South respectively. It is a complex established at the 19th century Villa that originally belonged to the Cassis Faraone family, where, in 1882, under the Hapsburg Empire, the Imperial State Museum, today National Archeological Museum of Aquileia was inaugurated.

It displays a collection of archeological finds strictly tied to the territory and to the surveys carried out on the site of Aquileia.

The museum itinerary expands entirely inside the Villa, over three storeys, and externally in the stores and the protected open lapidary galleries, overlooking the garden. The museum is a compound system that can be defined a museum in a museum since, besides the importance of the archeological contents that it exhibits, even the villa that contains it, has an intense historical, architectural and panoramic value. In fact, the building, its courtyard, its arboreal and vegetal property, constitute an undisputable value to transmit.

The MAN is a structure in continuous evolution that has undertaken a virtuous itinerary towards the improvement of its availability and of the assets exhibited in it. Many projects are at an advanced

point and are being realized while others are being planned with different levels of detailed studies. So far, the structure has improved the physical accessibility to the villa and is completing the offer with an itinerary that permits the haptic exploration of the works. The planning targets involve:

- the improvement of physical accessibility and the new organisation of the toilets;
- the reorganisation of the depositories that will become an essential part of the visiting system including a didactic room and a space for temporary exhibitions;
- the improvement of the accessibility of the lapidary galleries;
- the completion of the signage and of the cognitive tools useful to welcome and accompany a greater number of users.

The website, www.museoarcheologicoaquileia.beniculturali.it, is structured in a way to guarantee an easy consultation. It provides information in Italian and in English regarding the main aspects useful to the visit such as: visiting hours, booking method, tickets, contacts, events, organized didactic itineraries etc., besides, it indicates some behavioural rules to observe in the museum area and it presents detailed studies on the setting up of the various plans with descriptions and pictures linked to the more significant finds. The website is being updated.

The Museum is signalled and advertised by plastic-coated sheets on a metallic fencing, while an identifying panel is placed side by side to the entrance.

The structure is easily reached on foot from the parking site in Via Curiel, assigned also to the parking of coaches, and as an alternative, it can also be reached by private means of transportation. In fact, along Via Roma, opposite the entrance, there are stalls for temporary parking and one stall, marked by horizontal indications, is reserved, free of charge, for cars for the disabled. The reserved parking area is about 8 m away from the entrance of the museum that can be reached on foot on a porphyry pavement 174 cm wide. At certain points, its width is reduced to 137 cm due to the presence of poles, anyhow, this does not hinder the passage. The pedestrian walkway is in line with the entrance gate where the pavement presents a ramp that links with the street level, at the same time keeping a 5 cm step.

The entrance to the Museum is unique and easily identifiable by its 160 cm wide metal gate and a stone doorstep. From here, a straight line paved path, 187 cms wide, goes parallel to the glass cubicle that hosts the ticket office and bookshop. This path is protected and shaded by a pergola and it can be identified in its extremities as it is raised about 20 cm as compared to the level of the garden. The first stretch, immediately following the front door, is a ramp with a 4% slope, further on, it goes on the same level as the entrance and exit door of the ticket office up to the last stretch which is an ascending ramp. In its central part, the walkway links with the paving of the ticket office which is fitted out with a double swing door, 120 cm wide, marked by a delicate silk-screen printing. New silk-screen printings, more visible and recognisable are planned and will soon be put on all the glass walls.

Fig.2 Pavement with a 5 cm step.

Fig. 3 Entrance ramp.

Fig.4 External path with pergola.

Fig. 5 Entrance path.

Fig.6 Silk-screen printing on glass.

Fig.7 Silk-screen printing on glass.

The structure is fitted out with different views over the green area of the garden. The glass double-swing doors of the central room have antipanic handles and serve as emergency exits. A third emergency exit, free from any architectural barriers, is the main entrance of the ticket office, provided with an antipanic handle. The museum is equipped with wheel chairs which are given to

the visitors on request. Entering the glass ticket office, the visitor is welcomed by the trained staff at a counter in a minimal squarish shape, 109 cm high, devoid of any parts that may facilitate the approach of visitors on a wheelchair.

Fig.8 The ticket office counter

Fig. 9 Position of the tactile map.

Fig. 10 Frontal view of the tactile map.

Fig. 11 Side view of the tactile map.

The itinerary starts with the exploration and consultation of a tactile map. That is an integral part of the set up, placed between the entrance to the lapidary and the bookshop. Its size is 90x77 cm and it is fixed to the wall in an inclined position, at an average height of 127 cm from the ground. The height of the map (excluding the lower strip) is 98 cm and it protudes for about 28 cm from the wall. The map is based on the use of tactile elements, different shades and contrasting colours which make it easy for all to read. In it, all the uses of the external and internal areas and the themes of the sections of the visit are clearly described. The bilingual texts, (Italian and English) with the tactile superimposition in braille code can be easily read by all visitors. In the lower part, still empty at the moment, a Qr-code, that will guarantee the completion of the contents presented also with the sign language and subtitles, will be placed.

The ticket booth is connected to the exhibiting rooms of the villa by means of a ramp. The planking level links with a minimum slope to that in resin of the historical building where the exhibits lie. On the ground floor, the pave is interrupted and characterised by mosaics, mainly in black and white, built in it and cemented, delimited by a metal frame. Due to the different feeling of the footfall, these can act also as orientation elements for visitors with eye-sight problems.

Fig.12 Example of a mosaic placed at intervals on the resin floor.

Fig.13 Example of a chromatic contrast to emphasise the works.

The exhibiton rooms are characterised by a chromatic contrast that aims at highlighting the works exposed. The permanent settings are based on shades of green and grey and on the essential nature of the supports of the exhibits. The latter, in harmony with the minimal character, have different morphologies according to the type of exhibit that they have to present. They can be pillars, glass display cases or counters. The supports that lie on the floor, together with the walls of the rooms, normally constitute reference guides for visitors with eyesight problems and in the case of counters, these favour the approach of visitors on wheelchairs.

What can be a critical element for distracted or unaccompanied blind visitors are the glass display cases that stick out 20 cm from the wall towards the visitor or even exhibits with a complex morphology placed on the floor with elements that stick out of the outlines of the bordering supports. The glass display cases characterise mainly the first floor and lie at a minimum height of 112-115 cm from the floor, while on the ground floor, in the first room, there is one at a minimum height of 137 cm.

Fig.14 Exhibiting counter.

Fig.15 A pillar support.

Fig.16 An example of protruding glass display cases on the first floor.

Fig.17 A room with various typologies exhibiting elements and supports.

The exhibits are accompanied by captions immediately linked to their corresponding element and by bilingual texts placed on the walls. The chromatic contrast, even if not strongly accentuated, doesn't invalidate the legibility of the textual contents, that are very comprehensible in Italian, due to the good use of font and line-spacing, while it is necessary to mention the fact that the italics used for the English translation, is not compliant with the requisites of an easy reading. However, the principal texts proposed on the walls are carried out in Qr-code that permits the reading of the texts on smartphone, making it possible for the reader to enlarge the characters. Besides, the Qr-code guarantees the possibility of a future integration of the contents themselves.

As indicated above, the structure has two storeys connected by a stairway and a lift. The stairs, in white stone, 140 cm wide, are in chromatic contrast with the grey paving of the storeys and of the landing. This does not present elements in chromatic contrast and it is equipped with a minimal section railings, the same length as the ramps. The exhibits lying on the landings, are not

accessible to everybody, so, they will be recalled also on the second floor of the building which is being planned.
The lift, whose internal measurements are 150x140 cm, with a 90 cm wide door, is equipped with a keyboard, in chromatic contrast with the braille code placed at an average height of 114 cm.

Fig.18 Connecting stairway between floors.

Fig.19 Chromatic contrast between stairway and floor.

In order to expand the knowledge of the heritage, the MAN has elaborated services of guided and autonomous visits, sensitive to the visitors' needs. The guided visits must be booked in advance and are cared for by trained staff, who are competent in accompanying all types of public.

Fig.20 An itinerary of haptic exploration in the lapidary galleries.

Fig.21 Didactic laboratory for visitors with cognitive disability.

Thanks to a collaboration with the Rotary Club Aquileia-Cervignano-Palmanova, an itinerary with the intent of involving more public has been realised. This includes the realisation of the tactile map already described, Qr-codes that complete the informative panels of the rooms and an audio-guided itinerary, developed according to the plans of accessibility for the Basilica. This adopts the

beacon technology and, besides the descriptive contents, supplies also movement indications that render it usable autonomously even by blind visitors. The peculiarity of this system is the simplicity of its use that can be referred to in the sheet regarding the Basilica. At the moment, two smartphones that can be lent, free of charge, to blind visitors or to those with weak eye-sight on demand, are available. It can also be pointed out that the setting-up of the Museum permits a perfect modification of the beacons that aren't visible as they are fixed to the supporting guide of the lights.

Fig.22 A smartphone with an audio-description system.

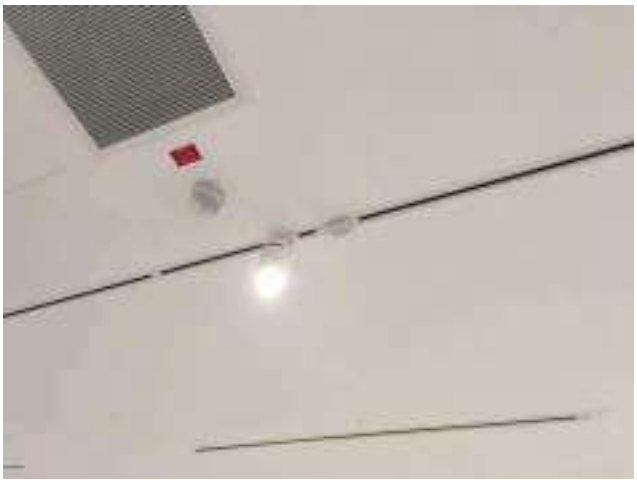

Fig.23 A beacon placed in the light support conduit.

The audio-described itinerary is strictly related to and interconnected with a tactile-exploration one, to which use the audio-descriptions are functional. Along the itinerary, every room is supplied with a tactile element, explorable during the visits. The identification of the works available to haptic exploration is obtained through the use of the audio-description or through sheets that communicate its position. The signage will be completed with specific pictograms.

On the ground floor the metal panels that cover the walls present visual, textual and graphic informative contents with a projection of historical images.

The aim of the Museum is to realise portable integrative and descriptive material elaborated with simple language and with the braille code.

Along the itinerary, there are some single chairs placed at intervals, often for the use of the staff. The seating accomodations for the public will be completed with new elements, both single and multiple seats, within a few months.

Fig.24 A seating accomodation for the public.

Fig.25 A seating accomodation used also by the public.

At present the toilets are placed outside the villa and they can be reached by means of an accessible path. There is more than one toilet, for men and for women and for the disabled. A 90 cm wide door takes to a 157x317 cm access corridor. The toilet for the disabled measures internally 177x308 cm and enables the necessary approaches: lateral approach to the toilet bowl and frontal to the sink. At present, the realization of a covered pavilion, like that of the ticket booth at the new entrance is already planned. This will permit an internal access between the museum and the toilets which will be completely renewed.

In the reorganisation, the internal link and the study of the new lavatories will guarantee a better use by a greater number of users.

The external itinerary of the lapidary spreads upon various levels linked by stairs and ramps in metal grilled, without neither railings nor side protection. These are placed in the central part as compared to the width of the passage, they are 115-120 cm long and have different slopes, at 12 or even 24%, rather high to limit the extension of the ramp. As indicated previously, the lapidary galleries will be the object of a future intervention to improve their usability.

The cement flooring is interrupted by museum displays.

Along the sides of the porticos there are findings provided with captions that, at this point, have become rather old, consequently deteriorated but, in any case, when still legible, they permit the comprehension of the inscriptions on the stone tablets. Even the area of the lapidary will be object of a future reorganisation that will include a careful analysis to guarantee the consultation of the works and safe mobility.

Fig.26 Itinerary of the lapidary with metal ramp.

Fig.27 Itinerary of the lapidary with metal ramp.

The garden, whose gravel paths are defined by hedges at least 70 cm high, present many seating accomodations, especially in the initial part bordering the entrance and the fountains. The museum, pursuing the improvement of its offer, has prepared some questionnaires asking for feedback from the users.

Considerations for the improvement of accessibility

Parallel to the carried out analysis of the evolution and the planning abilities of the Museum, some reflections are to be expressed.

In order to guarantee a better accessibility it could be useful to:

1) while revising the Internet site, consider the integration of the Service Card with information, even dimensional, functional to the mobility;

2) evaluate with the public administration the elimination of the 5 cm step on the entrance pavement to guarantee a perfect link with the street level and plan the insertion of tactilo-plantar signage corresponding to the pedestrian crossing and the main door;

3) consider placing warning signals in the presence of protruding display cases and putting behaviour bans with easily visible pictograms and completing the information on the audio supports;

4) consider the insertion in the lift keyboard of the titles of the contents on every floor;

5) evaluate interventions that facilitate the legibility of the stairs, especially in descent;

6) with the collaboration of the competent associations, consider the realisation of portable descriptive material in different languages and with web connections in order to render it functional to a greater number of users;

7) evaluate the insertion of flat supports or hooks near the tactile explorable works to free the user from any possible hindrance;

8) consider lowering the tactile map to render it more available even to people sitting on a wheel chair;
9) when planning the new toilets, consider the inclusion of “family services” or at least plan the cultural passage that guarantees the use of the same service for men and women. Consider a space dedicated to the changing of babies’ nappies and, if needs be, for adults to change and refresh themselves.

Summarizing Data Sheet

Here follows an elaborated summarizing diagram based on the analysis made and on the example produced by Associazione Tetra - Paraplegics F.V.G. O.n.l.u.s. for the web site: www.turismoaccessibile.fvg.it.

PARKING SITE	
Is there a parking site reserved for a disabled person near the visiting site?	Yes
Is there a stop for route buses near the entrance of the place to be visited?	No
Is there a planned pedestrian lane that, even if accompanied, permits a direct connection of the parking site to the entrance of the place to be visited?	Yes
Is the ground suitable for the transit of people with d motoric disability?	Yes
Are there natural or artificial guides useful to the mobility of people with eye-sight problems?	Yes
ACCESS	
The area in front and at the back of the entrance is coplanar or does it have such a slope as to be accessible?	Yes
Is the finishing of the paving correspondent to the access homogeneous?	Yes
Are there any elements that stick out of the limits of the paving (doormats, grids or closing pivots, etc.)?	Yes
Is there any difference in height at the entrance point?	No
Is there an access ramp or a sloping lane?	Yes
The access to the area is through:	An open metal door
Are there any other facilitations to the physical access?	No
NOTE: the entrance to the exhibition area is through glass doors.	
INTERNAL ITINERARY	
Is the material that makes up the paving adequate for tha passage	Yes

of people with motoric disability?	
Are there any natural or artificial guides useful to the mobility of people with eye-sight disability?	Yes
Is the presence of steps signalized with elements of contrasing colours?	No
If there is a ramp, does it always have such a slope that can be walked on autonomously?	Yes
Are there any decorative elements and equipments useful even for persons with motoric difficulty (level at 90 cm from the ground at the most)?	Yes
Does the decorative element placed along the itinerary create an obstacle or danger?	No
Are there any fire extinguishers lodged in a cavity?	No
Is the opening at least equal to or superior to 75 cm?	Yes
Are there any visio-tactile maps?	Yes
Is the area supervised continuously by specialized or trained personelle at the arrival of disabled visitors?	Yes
NOTE: there are protruding glass display cases.	
VERTICAL CONNECTION	
Does the visiting area spread over various levels?	Yes
Is there a lift or a mechanic system to overcome the difference in levels?	Yes
Are there any stairways?	Yes
If so, does the finishing of the steps present any disconnected or slippery areas?	No
Is there a tactile paving that signalizes the stairway?	No
Are there any adhesive step-markers in a sufficiently clear chromatic contrast at the end of the steps?	No
Are there any railings at 100 cm from the ground?	No
NOTE: the staircase does not need parapets as it is located in a special compartment.	
SEGNANE	
Is there a clear, comprehensive and easily legible (Chromatic contrast, font, dimension, line-spacing, etc) signage?	Yes
Is there a clear, comprehensive and easily legible (chromatic contrast, font, dimension, line-spacing,etc.) directional signage?	No
Does the informative signage respond to the requisites of easy legibility (Chromatic contrast, font, dimension, line-spacing, etc.)?	Not always
Is the signage placed at a height that can be read even by persons in a sitting position?	Yes
CONTENTS	
Are there any guided itineraries, subject to booking, done by trained personelle?	Yes

If so, who are they addressed to?	Motoric , visual, psychic disabilities and for Children
Can audio-guides be obtained in loco?	Yes, for people with visual impairment
If not, or as an alternative, where can they be obtained?	Infopoint of PromoTurismo FVG
Is there any printing material studied for different needs?	No
Are there any special projects, cultural initiatives, didactic activities?	Yes
EXPOSITION	
It is possible for a person with motoric disability to have access to:	All the itinerary
It is possible,for a person with hearing disability to have access to:	All the itinerary
It is possible for a person with eye-sight disability to have access to:	All the itinerary if accompanied
It is possible for a person with psychic disability to have access to:	All the itinerary if accompanied
What are the elements that limit physical access?	Staircase not marked with elements of chromatic contrast
Is it possible to touch the works or part of them in the presence of a staff member?	Yes
If so, what can be touched?	Stone evidences and mosaics
Is it possible to book in advance the help of a companion that can give a description or help touching the work for a tactile reading?	Yes
NOTE: currently the visit of the lapidary galleries and of the external areas needs to be accompanied. These areas will be the subject of a forthcoming reorganization.	
SERVICES	
Is there at least one toilet with dimensions in compliance with the current regulations, that allows the entry and the necessary approach?	Yes
If so, is it signalled?	No
Are there any large handles?	Yes
Are there any seats?	Yes
If so, are they provided with back and armrests?	Seats with backrest
Are there any fountains or water distributors?	Yes
Are there any waste baskets?	Yes
NOTE: the toilet will be newly designed.	

EARLY CHRISTIAN MUSEUM

Fig.1 External view of the Early Christian Museum.

The Early Christian Museum is situated at Monastero, a locality about 300 m to the North of the principal fluvial port. It is housed inside a structure that along the centuries underwent a lot of renovations. It is founded on the site of one of the ancient paleochristian Basilicas of Aquileia, erected outside the ancient city walls, on which, along the flow of time a Benedictine Monastery was built. The building was converted into a museum in 1961. In its rooms the remains of the paleochristian Basilica, its polychrome mosaics, besides other museum and lapidary displays belonging to the Aquileian territory are exhibited.

The Museum itinerary stretches inside a part of the old Monastery, organised over three storeys, two of which have galleries, that permit a bird's-eye contemplation of the archeological remains that lie on the ground floor.

In conformity with the principles of change of MAN, also the Early Christian Museum will soon undergo some renovations with the aim of improving the offer to the visitors and guarantee the accessibility to the different storeys. The Museum intends to: enlarge the exhibition space, render accessible the storeys by means of a lift, allow space for the toilets, divide the entrance to create a new space for reception and organise the setting-up completed with multimedial supports. So far,

the last section of the building has been acquired and the renovation and reorganisation are being planned.

The web site, www.museoarcheologicoaquileia.beniculturali.it, easy to consult, gives information in Italian and in English regarding the main aspects useful to the visitors: opening/closing hours, booking modality, tickets, contacts, general rules, etc. and presents details of the storeys with particular reference to their contents. The web site, that is the same one of the MAN, presents a section dedicated to the Early Christian Museum and, as already anticipated in the sheet of the National Archeological Museum, it is going to be revised.

The main facade of the Museum has an identifying inscription, that makes it immediately recognisable. It overlooks Piazza Pirano and is separated from the street and from the parking site, by a large square with homogeneous paving on one level, in which an excavating area, that displays archeological finds, delimited by metal railings, can be seen.

In the public tarmacked parking area, the visitor can make free use of stalls or of stalls reserved for vehicles used by the disabled, marked horizontally, provided with a side space to enable the visitor to get in and out of the vehicle. The tarmacked area is linked to the perimetral walkways near the parking site that is about 45 m away from the entrance to the Museum. The street crossing is marked and on one side, it has a disparity of 3 cm compared to the museum square. This is limited on two sides by buildings whose walls may constitute a natural guide useful to the mobility of visitors with eyesight problems.

Fig.1 Dedicated parking area.

Fig.2 Pedestrian crossing.

The Museum has a main and a secondary entrance, both with a big wooden. The main one is 130 cm wide with a stone doorstep, 6 cms high. From this, four steps in grey stone, each 8 cm high, without any chromatic contrast, pass over a 72 cm disparity and climb down, inside the building, up to the footfall. The descent is made easier by two lateral parapets with handrails.

At present, the second entrance, closed to the public and object of a plan of restoration, useful to visitors with motoric disability who wouldn't be able to overcome the steps mentioned above, has a double-swing metal gate, generally half open, with a 133 cm passage. This takes to a straight line grassy path, that runs along the building. This walkway, lit artificially, proceeds for the last tract, on a 143 cm wide wooden boardwalk with a 100 cm high parapet. As indicated by the staff, this boardwalk can be slippery; besides, it isn't perfectly linked to the natural level, it starts with an initial 5% slope, for at least 9 m walk and then, it goes on flat for 5 m and gets to the secondary entrance.

Fig.4 Main entrance.

Fig.5 Secondary entrance.

Fig.6 Wooden boardwalk of the secondary entrance.

Fig.7 Door connecting with the interior.

Fig.8 Ticket office.

Fig.9 Ticket office.

The ticket office is situated on the side of the main entrance in a specific unmarked space, with the opening hours fixed externally on the wall. The staff can be contacted through a 70x100 cm window at a height of 107 cm from the ground.

The inside of the museum, is an open space free from any decorations, divided into two parts: the first part has anintermediate floor, and the second into which, the visitor can enter, by means of a boardwalk, into the heart of the ancient Basilica and admire its finds.

Fig.10 Wooden boardwalk as seen from the ground floor.

Fig.11 Wooden boardwalk as seen from the first floor.

Fig.12 Paving in earthenware tiles with mosaics.

Fig.13 Informative panel placed as a contour to the mosaic.

On the ground floor, the present paving in earthenware tiles is intervalled by mosaics installed and delimited by metal runners. The collocation, on the same level with the floor, would permit the visitors to tread on the finds, as it is unavoidable to reach the exhibits placed around and be able to read the informative panels, otherwise too far away to be legible.

From the floor, a wooden walkway starts, an initial ramp, 2.8 m long, with a 6% slope, that reaches the planking level producing sideways some steps with variable elevations.

The boardwalk is 52 m long and 126 cm wide. It has parapets at 104 cm above the ground and it is at an axial longitudinal position compared with the length of the building. At the secondary entrance, the boardwalk links transversely, with a 130 cm wide glass path. At the end of the straight line path, a panoramic view of 304x475 cm of the mosaics can be admired.

Fig.14 Wooden ramp with side steps.

Fig.15 Wooden ramp with side steps.

Fig.16 Glass walkway.

Fig.17 Panoramic view point.

The storeys are connected by different types of cement stairways, all provided with a metal parapet with wooden railings. The stairway that takes from the ground floor to the first floor starts with 150 cm wide steps, with 14 cm risers, provided with adhesive strips in chromatic contrast and a 113 cm high parapet. Further on, the stairway proceeds along two ramps, each 100 cm wide, characterised by chromatic uniformity.

Between the first and the second storey there is a 105 cm straight line stairway with additinal steps fixed to the wall in metal grilled. Even this one doesn't have any chromatic contrast elements and is delimited laterally by a 103 cm high parapet.

Fig.18 Linking stairs between the ground floor and the first floor.

Fig.19 Linking stairs between the first and the second floor.

The paving of the three storeys, in earthenware colour, stand out clearly against the white walls. The exhibiting rooms are organised in a different way according to the extension of the floors and to the conformation of the paving. The use of the perimetral walls for the exposition of the stone exhibits placed on metal supports at different heights and with a maximum protrusion of 20 cm is an identifiable characterising element.

Fig.20 Stone archeological finds on wall supports.

Fig. 21 Stone archeological finds on wall.

On the ground floor, besides the Museum setup that are in the paving and the stone archeological finds on the walls, there are also exhibits in a central position that arise from the paving. The first floor hosts mosaics on cement bases raised as compared to the walking level, that can serve as natural guides to the mobility of visitors with eye-sight deficit. On the same floor there is also a wooden model representing the ancient Monastery provided with a cross section to help understand the altimetric division. The second or uppermost floor is characterised by the exposition of the stone archeological finds gathered together on panels and provided with numerical identification. Adjacent to each exhibiting panel, there is a support that displays the reference to the exhibits classified numerically. This results in a complex reading due to the use of font and to the dimension of the single textual parts, because of the big dimension of the panel and of its low placement that implicates a difficult reading of the textual parts at the bottom. It must also be noted that even the numerical references, put near the exhibits, are too small. The plans of the renovation of the building will also involve the revision of the setting up.

Fig.22 Exhibits on the ground floor.

Fig.23 Mosaics displayed on first floor.

Fig.24 Panels on the second floor.

Fig.25 Numeration of the exhibits on panels.

On the whole it can be be indicated that the present discriptive captions have not been made recently, but, being exposed inside the museum, they are eqaually well-preserved and legible. The contents are in Italian, have a good chromatic contrast, but they're not up to the standards required for an easy reading. A good example of this are the captions placed on the floor without inclination to facilitate the reading, inside the area of the mosaics they refer to, or the descriptive panels, also placed on the ground floor, disposed in a way that compels the visitor to tread on the museum elements to obtain the right distance to be able to read. It must be reaffirmed that these considerations regard the analysis of the present state of the locations that will soon be modified.
For the knowledge of the heritage, the Museum offers the services of guided visits booked previously. The audioguides that can be procured at the Infopoint of PromoTurismoFVG don't include the Early Christian Museum.

Considerations on the improving of accessibility
Parallel to the analysis carried out, and to the planning of the Museum, some reflections must be made, without involving the merits of the setup organisation, and of the renovation.
In order to guarantee a better accessibility it could be useful to:
1) evaluate, in the revision of the website, the integration of the Service Card with dimensional contents, to facilitate mobility;
2) evaluate, with the public administration, the elimination of the 3 cm step at the square in front of the entrance to the building to guarantee a perfect connection with the street. Plan to insert tactile-plantar signage in correspondence to the pedestrian crossing and the entrance portal;
3) evaluate the predisposition of an accessible exterior itinerary that links the metal gate to the boardwalk, that can be easily used also by visitors with motorial disability and so with a compact and stable paving;
4) evaluate the maintenance of the wooden boardwalk to assure a non-slip planking level;

5) ìnsert a directional and identification signage (in conformity with the requisites of visibility, chromatic contrast, type of character, relative height, etc.) to steer the visitor towards the outside in order to identify easily the ticket office and the entrances;
6) evaluate, while modifying the descriptive panels, the respect of visibility, chromatic contrast, type of character and relative height, etc., considering also the study of the layout, the text and the positioning of the location;
7) evaluate interventions that render the internal stairs visible, especially while going down;
8) evaluate the marking or a delimitation of the fixing point of the wooden ramp into the paving of the ground floor;
9) consider the realisation, in collaboration with the competent associations, of portable descriptive material, elaborated in different languages and with the insertion of website links in order to be useful to a greater number of visitors;
10) evaluate the insertion of seats or points of support, especially useful during guided visits;
11) evaluate the possibility of dedicating some exhibits to haptic exploration, specifically marked, and predispose, in the new arrangement, flat surfaces or hooks near the exhibits to free the visitor from any possible hindrance;
12) evaluate the guided tactile exploration of the small wooden model, according to its resistance, even only on the external part.

Summarizing Data Sheet

Here follows an elaborated summarizing diagram based on the analysis made and on the example produced by Associazione Tetra - Paraplegics F.V.G. O.n.l.u.s. for the web site: www.turismoaccessibile.fvg.it.

PARKING SITE	
Is there a parking site reserved for a disabled person near the visiting site?	Yes
Is there a stop for route buses near the entrance of the place to be visited?	No
Is there a planned pedestrian lane that, even if accompanied, permits a direct connection of the parking site to the entrance of the place to be visited?	Yes
Is the ground suitable for the transit of people with d motoric disability?	Yes
Are there natural or artificial guides useful to the mobility of people with eye-sight problems?	Yes

ACCESS	
The area in front and at the back of the entrance is coplanar or does it have such a slope as to be accessible?	No
Is the finishing of the paving correspondent to the access homogeneous?	Yes
Are there any elements that stick out of the limits of the paving (doormats, grids or closing pivots, etc.)?	No
Is there any difference in height at the entrance point?	Yes
Is there an access ramp or a sloping lane?	Yes
The access to the area is through:	AN open wood door
Are there any other facilitations to the physical access?	No
NOTE: the building will be subject to restructuring.	
INTERNAL ITINERARY	
Is the material that makes up the paving adequate for tha passage of people with motoric disability?	Yes
Are there any natural or artificial guides useful to the mobility of people with eye-sight disability?	Yes
Is the presence of steps signalized with elements of contrasing colours?	Not always
If there is a ramp, does it always have such a slope that can be walked on autonomously?	Yes
Are there any decorative elements and equipments useful even for persons with motoric difficulty (level at 90 cm from the ground at the most)?	Yes
Does the decorative element placed along the itinerary create an obstacle or danger?	No
Are there any fire extinguishers lodged in a cavity?	No
Is the opening at least equal to or superior to 75 cm?	Yes
Are there any visio-tactile maps?	No
Is the area supervised continuously by specialized or trained personelle at the arrival of disabled visitors?	Yes
VERTICAL CONNECTION	
Does the visiting area spread over various levels?	Yes
Is there a lift or a mechanic system to overcome the difference in levels?	No
Are there any stairways?	Yes
If so, does the finishing of the steps present any disconnected or slippery areas?	No
Is there a tactile paving that signalizes the stairway?	No
Are there any adhesive step-markers in a sufficiently clear chromatic contrast at the end of the steps?	Not always

Are there any railings at 100 cm from the ground?	Yes
NOTE: the building will have an elevator.	
SEGNANE	
Is there a clear, comprehensive and easily legible (Chromatic contrast, font, dimension, line-spacing, etc) signage?	Yes
Is there a clear, comprehensive and easily legible (chromatic contrast, font, dimension, line-spacing,etc.) directional signage?	No
Does the informative signage respond to the requisites of easy legibility (Chromatic contrast, font, dimension, line-spacing, etc.)?	No
Is the signage placed at a height that can be read even by persons in a sitting position?	Yes
CONTENTS	
Are there any guided itineraries, subject to booking, done by trained personelle?	Yes
If so, who are they addressed to?	Motoric , visual, psychic disabilities and for Children
Can audio-guides be obtained in loco?	No
If not, or as an alternative, where can they be obtained?	/
Is there any printing material studied for different needs?	No
Are there any special projects, cultural initiatives, didactic activities?	Yes
EXPOSITION	
It is possible for a person with motoric disability to have access to:	Not accessible
It is possible,for a person with hearing disability to have access to:	All the itinerary
It is possible for a person with eye-sight disability to have access to:	All the itinerary if accompanied
It is possible for a person with psychic disability to have access to:	All the itinerary if accompanied
What are the elements that limit physical access?	External path of secondary slippery access, unmarked stairway with elements of chromatic contrast, upper floors not accessible to people with physical disabilities
Is it possible to touch the works or part of them in the presence of a staff member?	Yes
If so, what can be touched?	Stone evidences
Is it possible to book in advance the help of a companion that can give a description or help touching the work for a tactile reading?	Yes
SERVICES	
Is there at least one toilet with dimensions in compliance with the current regulations, that allows the entry and the necessary	No

approach?	
If so, is it signalled?	/
Are there any large handles?	/
Are there any seats?	No
If so, are they provided with back and armrests?	/
Are there any fountains or water distributors?	No
Are there any waste baskets?	Yes
NOTE: the renovation project will include the insertion of toilets.	

Conclusive considerations on the state of the art and the inclusion of publics

The analysis of the areas has highlighted the presence of various subjects responsible of the management and maintenance of the analysed sites:

Fondazione Aquileia for Domus and Bishop's Palace, Fondo Cal, Fondo Cossar, Fondo Pasqualis, Roman Forum, River Port, Necropolis, Südhalle;

Mibac (Ministery for Cultural Heritage and Activities) for the National Archeological Museum and the Early Christian Museum;

PromoTurismoFVG for Infopoint;

So.Co.Ba. (Society for the Conservation of the Basilica of Aquileia) for Basilica and Baptistery.

Among the institutions mentioned above, there is already a dialoge and a planning ability regarding the valuation of the cultural heritage on the UNESCO web-site of Aquileia, and some actions, have already been taken singularly by each institution, aimed at improving the accessibility and the availability, of their specific area of competence.

Generally speaking, it can be affirmed that Aquileia, given its dimensions, articulations of the available areas, their touristic typology (tourist flow that interests the entire regonal territory) is absolutely suitable to receive any type of public.

It should be pointed out that, for most of the sites, the existing offer permits, a visit subordinated to two conditions: an escorting companion or specific equipment, according to the characteristics of the itinerary to be accomplished. Consequently, correct communication of environmental and space conditions must be considered a priority and fundamenal to permit the visitors to equip themselves according to their needs, to carry out the itinerary each of them has chosen. This should be considered as a transitory element, precursor of planned and targeted actions.

Based on the cultural value and on the territorial dimensions, one could consider a moment of cooperation between the associations mentioned above and the Municipality of Aquileia, aimed at drafting a coordinated plan for the development of projects and their applicability in actions focused on the improvement and the usability of the places of cultural interest. Once a unity of intents is reached and a shared organisation is formulated, an offer, coordinated in form and language, could be elaborated, starting from the information available on the web-sites up to the local communication.

The operations to apply, based on the general analysis of priority, are part of different dimensions that refer to the urban, architectural, preparative and communicative spheres.

Although the virtuous initiatives put into practice by the competent authorities can be observed, some general considerations regarding the improvement of accessibility, already analyzed in the individual sheets, will follow. The notes are meant to respond to the criticism that emerged during the interviews with the intent to offer autonomy[20] to the visitors.

20 With the concept of autonomy: either a total autonomy or, if the personal and/or environmental conditions won't permit it, an autonomy conditioned by the need of an accompanying person, considering integrative

In order to permit physical accessibility to the various sites, it would be opportune to develop accurate solutions for the urban itineraries, from the nearest parking area up to the access to the area of interest.

With regards to the computer analysis, at the moment, it may be unrealistic to speculate on a single operating system to advertise the places of cultural interest on the UNESCO site of Aquileia. However, it can be taken into consideration that the web sites, referring to the different subjects, should be based on an elementary and well-organised structure to render them easy to consult by the users and inter-connected to integrate the data.

The elaborated contents, regarding a specific subject (texts, videos, 3d reconstructions, audio contents, also dedicated to a specific type of users) could be inserted in the reference page of the same, where ample space could be reserved to functional information, to mobility and to the acquisition of acquaintance with the place. In fact, in the planning of materials useful to the tourists' visits, and therefore even of the websites, (as various authorities are beginning to take into consideration), it is necessary to know that disabled people need more detailed information about the context. Hence, it would be useful to prepare a Service Card that completes the basic information already present in the data, regarding: the position of the parking sites, external and internal mobility, the characteristics of the itineraries, the existing critical points that are either unsolvable or not yet resolved, the necessity of an accompanying person or the use of specific assistance (for example Trirides for visitors on a wheelchair necessary to overcome, little disparities and mobility on natural or instable ground), the communication of the services offered in loco and those procurable from other sites and the description of the place. The information should be simple, formal and communicative, giving ample space to the use of pictographs or pictures with descriptive captions, in order to be comprehensible even to visitors with eye-sight disability, by means of the use of a screen reader. Besides, the introduction of tools that permit the modification of the chromatic contrast between the text and the background, the automatic enlargement of the visualisation or the consultation of videos in sign language with sub titles (for example: videos in LIS with subtitles in English) necessary to translate the audio contents. Furthermore, some useful downloadable, printable, promoting elements, such as the pdf file, could be useful.

In order to permit the visitor to move and be acquainted with the territory, the portable material provided to the visitors, starting from the maps with defined programmes of the visits, and precise indications regarding the accessibility of the sites, the timing and the location of the main services could be reorganized and updated. The portable paper descriptive material should be studied so that it can be useful to various types of public, using different styles like: brochures with simple characters, with elements in relief and texts in braille, for children or, also, with more technical contents. These could be completed with the Qr-codes. The use of Qr-codes permits different

solutions that can render the visitor an active part of the experience.

actions that can be incorporated in time: the access to the videos in sign language with subtitles, the reading of the brochure text in enlarged letters at the visitor's discretion, the access to the integrative sheets like those regarding architectural and artistic details that can barely be identified on the place, to facilitate the comprehension of the guided visits, or other actions according to the planning choices.

In order to align the graphic design of the informative panels (currently in a planning phase), those ruined by age and no longer functionable could be eliminated and replaced by others with updated directional, informative and descriptive signage in conformity with the requisites of visibility, chromatic contrast, type of characters, dimensions, layout, etc., evaluating an opportune location in the context. This to steer and inform the visitors inside the rooms and to favour the identification of the services and of the the external structures.

In order to involve more public and to annul the still existing concept that the places of cultural interest are dedicated only to able-bodied people with a high level of education, the descriptive signage present in loco should be planned using accessible and comprehensive contents, neither too simplified nor excessively technical, possibly integrated by tools that give ample information, through technology, using audio and video information.

Aquileia presents various archeological sites in the open air controlled by turns of qualified personel. To evade the inconvenience of the temporary lack of supervision, the panels could be provided with a telephone number to contact in case of emergency.

At the moment, despite the important efforts made by the authorities to improve the situation, the knowledge of the sites is based totally on the visual perception and on a general description not always easily accessible. Even if some virtuous examples of audio and tactile tools that are being introduced can be noticed, the possibility of planning visuo-tactile tools, that permit a better comprehension of the exhibits and of the historical organisation of the sites to a wider range of public, accessible also to deaf visitors, must be pointed out.

In order to render the visits more comfortable, and sustain the visitors in an assisted, unitary itinerary that includes all the sites in Aquileia, the following improvements can be taken into consideration: toilets with various facilities for families, seating accomodation in the shade, water fountains at double level, courtesy aids for mobility, gadgets for shading, etc.

In conclusion, notwithstanding all the single authorities that have organised each in their area of competence, room for the reception and the organisation of the visitors, during the interviews the necessity of a unified welcoming indoor centre, near to a vast parking site, in an area that can be easily reached by most visitors, where to unite the groups, especially in case of bad weather and permit them to be introduced to the conceptual and spatial dimension of Ancient Aquileia. A place where they can understand the importance of the city and its extension and enjoy the beauty of the archeological sites, offering an alternative visit and preparing them for the experience they're about to have. Understanding today, the prominence of Ancient Aquileia is easy only for experts. So, the

realisation of a full immersion space can be realised, where multisensorial information can be obtained and where the visitor is introduced to the dimensions of Aquileia with a large tactile scale model, where the modern city and the neighbouring districts that overlie the Ancient one, propose again the size of the structures, indicating the levels that separate the layers of the buildings of the various time periods.

Good practice: examples and cases for a better use of the cultural heritage

Here are some examples of places of cultural interest of various typologies: Museums, archeological areas, cultural areas, that can be distinguished for the attention given to the improvement of the availability of their structures, contents and offered services.

sito	***good practice***	***link***
Brooklyn Museum – New York	Visit itineraries, app *Ask*	https://www.brooklynmuseum.org/ask
Galata Sea Museo - Genoa	Web Site, Accessibility of the itineraries, Itineraries of the visit	http://www.galatamuseodelmare.it/servizi/
Louvre - Paris	Web Site, Accessibility of the itineraries Visit itineraries	https://www.louvre.fr/accessibilite/handicap-moteur#tabs
Archeological Museum-Civic Museums - Udine	Web Site, Accessibility of the itineraries Visit itineraries, Specific contents downloadable even from the web site.	http://www.civicimuseiudine.it/it/musei-civici/musei-civici-del-castello/museo-archeologico
MOMA- New York	Accessibility to the itineraries, Visit itineraries, app *KeyARt*	https://www.moma.org/visit/accessibility/
Civic Museum of Naturale History- Trieste	Visit itineraries, Specific contents in simplified language and CAA	http://www.museostorianaturaletriestee.it/visite/museo-accessibile/
Musei In Comune – Rome	Web site	http://www.museiincomuneroma.it/it/informazioni_pratiche/carta_dei_servizi
Nazional Museum Of Cinema - Turin	Toilets with changing room	
Museo San Francesco - Montefalco	Visit itinerary with beacon technology	https://www.museodimontefalco.it/it/orari-prezzi-museo-montefalco_21.html
Pretorio Palace -	Visit itineraries,	http://www.palazzopretorio.prato.it/it/

Prato	Specific contents in LIS e CAA, Courtesy aids	la-visita/accessibilita/
Archeological Park-Pompei	Recommended organisation of the itineraries, Services	http://pompeiisites.org/info-per-la-visita/pompei-per-tutti/
Peggy Guggenheim Collection - Venice	Web Site Itineraries for people with eye sigh disability	http://www.guggenheim-venice.it/accessibilita.html
Solomon R. Guggenheim Museum – New York	Web site Accessibility to the itineraries, Specific contents for people wirh sensorial and cognitive disabilities also downloadable from the Web Site	https://www.guggenheim.org/accessibility
The Smithsonian Institution – Washington D.C.	Specific contents for people with sensorial and cognitive disabilities also downloadable from the Web Site	https://www.si.edu/visit/VisitorsWithDisabilities
Victoria And Albert Museum - London	Web Site, Accessibility to the itineraries, Specific aids for the accessibility to the contents	https://www.vam.ac.uk/info/disability-access

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