



DEVELOPING INCLUSIVE TOURISM THROUGH AN ACCESSIBLE TRAVEL CHAIN AND SERVICE QUALITY ASSESSMENT

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Abstract. This article examines inclusive tourism as a system that enables participation in travel, equitable use of services and access to information suited to travellers' requirements. Its aim is to develop a model for assessing accessible travel in Uzbekistan across a continuous journey, from planning to post-visit feedback, rather than through isolated facilities. The analysis draws on the United Nations Convention on the Rights of Persons with Disabilities, World Health Organization evidence, bibliographic information on ISO 21902:2021, peer-reviewed tourism studies and official sources from Uzbekistan. A comparative document analysis informs a six-stage travel-chain model, a classification of barriers, a map of responsible actors and proposed audit indicators. No original survey, site audit or impact estimate is reported. The indicators are intended as a methodological basis for subsequent field verification and user-centred research. The central finding of the conceptual analysis is that a credible judgement about service quality requires testing accessibility at every essential stage of a particular route and for specified access requirements.

Keywords: inclusive tourism; accessible tourism; travel chain; universal design; service quality; Uzbekistan.

1. Introduction

In tourism, inclusion concerns a person's ability to choose, plan and undertake a journey. It extends beyond installing a ramp at the entrance to a building. Information available before departure, boarding transport, moving around a hotel, understanding a visitor attraction and communicating with service staff together shape the experience. If



one essential stage fails, investment in other stages may not deliver the intended benefit to the traveller. A label attached to an individual “accessible” facility therefore cannot establish that a complete journey is usable.

Article 30 of the Convention on the Rights of Persons with Disabilities addresses equal access to cultural venues and tourism services [1]. The World Health Organization estimates that approximately 1.3 billion people, or 16% of the global population, experience significant disability [2]. This number is neither an estimate of tourism demand nor a count of potential customers ready to travel. It is population-level evidence of the prevalence of different access requirements. Older people, people with temporary mobility limitations, families travelling with young children and others may also need features that make travel easier [3].

This paper uses “inclusive tourism” as the broader idea of participation, dignified access to services and social or economic opportunity. “Accessible tourism” denotes the operational part concerned with physical, informational, digital and organisational access. Price and geographical inequality also affect inclusion, although the main unit of analysis here is the usability of an actual travel route. The purpose is to develop an assessment and governance model for that unit in Uzbekistan. The research question is: which links in the travel chain, and which measures, can be used to evaluate inclusive service quality?

2. Literature and Conceptual Foundation

Darcy and Dickson [3] relate accessible tourism to requirements that can change across the life course. Their approach encourages the design of experiences for varied abilities and circumstances instead of a rigid divide between an assumed “standard” tourist and everyone else. Buhalis and Michopoulou [4] show that access requirements are heterogeneous, while information about the built environment and online information themselves must be accessible. A detailed description that enables a traveller to judge the suitability of a particular route or room is more useful than a generic “accessible” label.



Hospitality barriers arise through interaction between the physical environment and staff practice. In an exploratory study of hotel experiences, Poria, Reichel and Brandt [5] describe distinct difficulties encountered by wheelchair users, people using crutches and blind guests. Their findings do not directly describe hotels in Uzbekistan, but they support an audit that distinguishes different user requirements rather than applying a single undifferentiated mark. ISO 21902:2021, entitled “Tourism and related services — Accessible tourism for all — Requirements and recommendations,” provides an international reference point for the field [6]. This article does not interpret the standard’s complete technical provisions as binding local legal requirements.

The literature suggests three analytical distinctions. First, the existence of a feature differs from the ability to use it safely and independently. Second, the accessibility of one site differs from that of the route leading to and from it: a suitable hotel room is of limited use if the transfer from a station is unavailable. Third, published information differs from verified information: the existence of a map cannot guarantee the accuracy of its descriptions. The model below links these distinctions to observable stages and checks.

3. Materials and Method

The study uses comparative document analysis and conceptual modelling. Selected material falls into four categories: an international rights instrument [1], population-level evidence [2], original academic research in tourism and hospitality [3–5], and official decisions or reports concerning Uzbekistan [7–10]. Each source is interpreted within its evidential scope. A decision identifies policy and intended measures; an official news item records a reported activity in a particular period; and a research article provides evidence within the setting in which that research was conducted.

The analysis proceeded in three steps. First, six service points in a travel journey were identified. Second, potential barriers were grouped as physical, informational and digital, communicative, organisational or economic. Third, a responsible actor, an



observable check and a possible data source were assigned to each point. The resulting model is designed to combine observation, user participation and administrative records. No new tourist survey, on-site audit of facilities or transaction-level dataset was collected for this paper. The proposed links are testable propositions, not estimates of causal effects.

Source selection prioritised direct relevance to travel access, service chains and user experience. International studies and national policy documents were not pooled as if they formed a single statistical sample, because their units of observation differ. The analytical notes distinguished what a document prescribes, what an organisation reports and what still requires verification at the site. This distinction prevents the adoption of a decision from being mistaken for proof that service quality has improved uniformly across facilities. Future research using the proposed model should retain the same separation of evidence types.

4. Policy and Practice in Uzbekistan

Presidential Resolution No. PQ-20 of 12 January 2024 concerns the development and encouragement of accessible tourism infrastructure. An explanatory page on the government portal describes measures relating to cultural heritage sites, transport hubs and access to tourism information [7]. The resolution identifies a policy direction; it does not prove that every site has already achieved the same level of accessibility. Some incentives also applied for specified periods and should not be described as permanent programmes without further verification.

According to the Tourism Committee, its “Inclusive Accessible Tourism” and “Inclusive Travel” programmes planned trips for 5,625 socially vulnerable people during January–June 2025 and reported trips for 8,337 people in that period [8]. These figures describe the scale of organised trips. They do not measure route accessibility, participant satisfaction or the possibility of travelling independently. A further Committee communication in 2026 identifies transport, heritage sites, museums and digital information among the directions of work on accessible tourism [9].



A local digital-information initiative has also been reported. In its review of higher education activities in 2025, the Committee stated that researchers at Bukhara State University had launched an “Inclusive Tourism” mobile application and interactive map [10]. The announcement does not establish the tool’s coverage, updating frequency or effects on users. A subsequent study could test whether the descriptions of facilities have been verified, whether their formats are usable and whether they correspond to what travellers encounter during a visit.

In Uzbekistan’s historic cities, adaptation must be considered alongside the preservation of architectural heritage. The most appropriate response need not be the same device at every site. An alternative entrance, assistance arranged in advance or an exhibition explained through another sensory channel may be suitable in different circumstances. Yet an “alternative” should not arbitrarily deprive a visitor of the substance of the main experience. The available route, the contact person and the notice required to arrange support must be communicated clearly in advance.

Table 1. Travel-chain barriers and observable service checks

Stage	Potential barrier	On-site or digital check	Main actor
Discovery	Vague “accessible” label; outdated details	Are entrance, toilet, room and assistance conditions described separately?	Destination manager; platform
Booking	No way to state an access requirement in advance	Is there a contact point and written confirmation of arrangements?	Tour operator; hotel
Arrival	Gap between transport and the destination	Are transfer, stop and pedestrian route tested as one journey?	Transport provider; local authority
Accommodation	Adapted room unavailable or equipment out of order	Are the room and shared areas checked in actual use?	Hotel
Experience	Tour, food service or information format unsuitable	Are alternative formats and staff assistance agreed beforehand?	Site; guide; catering provider



Stage	Potential barrier	On-site or digital check	Main actor
Feedback	Complaint receives no effective response	Can the case status and time to remedy be tracked?	Service owner; destination manager

Source: Author’s analytical classification based on [3–5, 7–10]. The rows are not results of a national field audit.

5. The Travel-Chain Model and Service Quality

Figure 1 sets out the proposed journey in six stages. The first three bring the traveller into the service, while the remaining stages determine the experience and the possibility of improving it. Information, assistance and emergency arrangements matter throughout the chain. If an installed feature is out of order, or a traveller cannot reach it, a check that merely records its existence misclassifies that stage as usable. The model therefore focuses on the journey performed under a specified user scenario rather than a catalogue of equipment.

Figure 1. Six connected stages of an inclusive travel journey



Source: Author’s conceptual model. Arrows indicate the sequence of the journey.

For a practical audit, let a_i equal 1 when all essential accessibility conditions at stage i have been verified for the relevant user scenario, and 0 when at least one such condition is not met. Continuity for that scenario and route can then be represented by $C = \min(a_1, \dots, a_6)$. The logical rule yields $C = 1$ only if every essential stage is satisfied. It is not a universal score for all travellers with disabilities: a wheelchair user, a person with a visual impairment and a person with a hearing impairment require separately specified checks. A single average “accessibility score” may conceal a decisive break in the chain.



The model leads to three propositions. First, detailed and verified information may reduce unexpected obstacles after booking. Second, coordinated audits across transport, accommodation and attractions may increase the share of routes that remain usable from beginning to end. Third, staff training and a functioning remedy process may improve the experience of using the same physical infrastructure. Each proposition can be tested in field research; none is presented here as an effect measured in Uzbekistan.

Consider a hotel that advertises an adapted room but cannot be reached from the station by a usable transfer. High room quality does not resolve the discontinuity in the route. In another hypothetical case, transport and the entrance may be accessible while an excursion is delivered only through audio, excluding a guest who needs written information. These are logical illustrations of what the model should detect, not claims about observed local incidents. Travellers and providers should identify which features are essential and which are additional for each scenario before scoring begins.

The starting point of the route matters. If a visitor cannot get from a city transport hub to an attraction, the quality of the exhibition inside cannot repair that failed link. An audit should therefore record the pedestrian connection, surfaces and crossings, transport timetable and assistance options on the same route map. Where a feature depends on time, such as a lift available during limited hours, operating hours must accompany the statement that it “exists.” The correspondence between a booking confirmation and conditions on arrival is an outcome in its own right.

6. Indicators and Data Collection

The unit of assessment should be a specified itinerary under a specified access scenario, rather than a general destination label. A pilot might follow a two-day route from a railway station to a hotel, museum and dining venue. At each point, the audit would distinguish the presence of a feature, its functioning, safe use, staff assistance and consistency with information supplied before travel. Recording the inspection date and responsible verifier makes it possible to determine when the published description should be updated.



Table 2. Proposed indicators for inclusive tourism service quality

Indicator	Calculation	Interpretation and source
Continuous-route share	Verified routes with all essential stages usable / all inspected routes × 100	On-site audit by access scenario; report each group separately.
Verified-information share	Accessibility descriptions confirmed on site / descriptions inspected × 100	Pair platform records with current on-site conditions.
Booking fulfilment	Confirmed requirements fulfilled on arrival / bookings stating an access requirement × 100	Booking record and service record, with traveller consent.
Time to remedy	Median days from receipt of a complaint to a documented solution	Complaint register; check the quality of the solution separately.
Experience measure	Share answering that they could use the service they needed	Voluntary anonymous post-visit survey; report non-response.

Note: These are proposed formulas, not current national estimates for Uzbekistan.

Each line in an audit form needs an explicit verification criterion. For an entrance, “ramp present” is insufficient: the approach, the passage through the door, obstacles during use and any arrangement for assistance should be recorded. In a hotel room, the description should extend beyond door width to movement beside the bed, bathroom use and emergency exit information. Exact numerical specifications for these features require the applicable technical rules and a competent site audit; the general matrix in this article is not a substitute for them.

Three forms of evidence should be compared: the provider’s description, the auditor’s observation and the user’s experience. Where they disagree, the reason should be examined rather than declaring one source correct in advance. Staff may be willing to assist, for instance, yet the booking page may not tell a visitor that such assistance exists. Conversely, all equipment may be installed but temporarily unavailable on the audit date. Such cases should be recorded with the date of failure and the date of the next check.

A target percentage should not be imposed before the baseline and data quality are understood. The first measurement period should establish a reproducible method,



not simply produce a high number. Subsequent changes become interpretable when the same scenarios and sampling rules are retained. Adding new and more difficult itineraries can lower the overall proportion without any deterioration on routes inspected previously. Reports should therefore present results for the continuing set of routes and the expanded set separately.

Every proportion needs a clear denominator. Rechecking only facilities already thought to be suitable, then treating them as representative of all facilities, creates upward bias. Surveying only people who completed a trip similarly excludes those who could not start one. Failed bookings, cancelled plans and requests for assistance should be part of the evidence, with reasons recorded. Where the number of routes is small, both the numerator and denominator should accompany percentages to avoid an impression of unjustified precision.

Data can be disaggregated by access scenario, location, transport mode and price. Detailed diagnoses, however, should not be collected or retained without a clear need. For service evaluation, a question about the function or support required is often more useful than one about medical status. Participation in a survey should be voluntary; reports should remove identifying details, especially when a small subgroup could make an individual recognisable.

A pilot could include at least three tasks: independent travel using a wheelchair, obtaining written or sign-language support, and obtaining large-text or audio guidance. These are service-testing scenarios, not medical categories; requirements differ within each group. The starting point, destination, time window and success criterion must be written down for each task. Comparing an auditor's checklist with a participant's account reveals whether the presence of equipment translated into a usable experience. Reports should present the number of routes examined, the number completed, the stage at which a journey failed and the time taken to implement a remedy. If users report poor experiences while every audit box has been ticked, the checklist itself requires revision. Monitoring only how quickly a complaint was "closed" may encourage administrative



closure without a real solution. “Provider reports a remedy” and “traveller or independent reviewer verifies the remedy” are distinct states. Repeated complaints can help identify recurring faults; a falling complaint count alone does not prove improvement, because some affected travellers never file one.

Published information may appear in several languages and formats, but each version should draw on one verified record. Otherwise a map, a hotel website and a tour operator may offer conflicting descriptions of the same room. The source record should carry an update date, responsible organisation and contact method. A telephone or in-person assistance channel must also convey the same substantive information to travellers who cannot use a digital platform.

7. Coordination and Phased Implementation

No single organisation controls the full tourism experience. A transport provider manages a station or transfer, a hotel its rooms and common areas, a cultural site the interpretive experience, and a platform the description presented to visitors. Without destination-level coordination, each actor may declare its own premises accessible while overlooking the path between them. A route owner or coordinator should therefore define a shared audit form and a process for updating descriptions.

Figure 2 shows a proposed management cycle. Travellers, organisations of persons with disabilities and service providers first specify requirements together. Typical itineraries are then tested on site. Only verified features enter the public description; identified gaps receive an owner and deadline. Feedback and complaints shape the next audit. The management object is a service process that can be checked again, rather than a one-time declaration of completion.

Figure 2. A cycle for managing inclusive routes and updating information



Source: Author’s proposed management cycle; it does not depict an existing administrative procedure.

An initial phase could select two or three commonly used routes in one city and conduct a joint audit across different access scenarios. The next phase would map interruptions and replace broad labels with verified details about entrances, functioning lifts, toilets, audio or written information and the procedure for requesting assistance. Staff could then practise real service scenarios, and a date for reassessment would be set. A local pilot allows the measurement procedure to be refined before it is applied more widely.

A later evaluation should collect before-and-after observations for the same routes and scenarios. If transport schedules, repairs or prices change simultaneously, any positive shift cannot automatically be attributed to one intervention. Where feasible, a comparable route not yet adapted should be observed, with seasonality considered. More visits to a digital platform alone do not prove that a physical journey has become easier; platform data must be read alongside site audits and traveller experiences.

Responsibility for three decisions should be recorded in advance: who verifies a facility description, who receives a fault report, and who checks that the remedy works. A platform may publish information, while the hotel confirms whether its lift functions, and a route coordinator checks the link between stages. Update frequency can reflect risk: a lift failure needs prompt notice, while a relatively stable building description can be rechecked on a schedule.

Priorities can be considered through three questions: Does the barrier stop a journey entirely? How many different access scenarios does it affect? How quickly can



it be removed? These questions address equal access and safety, breadth of benefit and resource use. Existing visitor counts should not be the sole basis for priorities, since groups who cannot enter a site are absent from those counts. Representatives of affected travellers should participate in the discussion.

8. Discussion

The model shifts the question from whether an individual attraction is labelled accessible to whether a traveller can complete a specified route. It connects infrastructure, staff practice and digital information to a shared outcome. A minimum-stage rule, however, does not alone decide investment priorities. Removing a decisive obstacle on one route may produce a quick gain, whereas adapting transport elsewhere may require substantial capital. Costs, use frequency and heritage-conservation constraints need to be considered openly.

Because inclusion reaches beyond disability, affordability and geographical access also warrant separate observation. At the same time, a usable path for a wheelchair user, written information for a person with a hearing impairment and audio orientation for a blind visitor cannot be treated as interchangeable. Combining distinct requirements into one average “inclusion percentage” risks concealing gaps. Travellers should be able to inspect the basic features of a service without disclosing personal information, and request additional assistance if they choose.

The article is limited by its reliance on documents. Official reports may not record all problems, and studies conducted abroad cannot fully reflect local transport and heritage conditions. The proposed scenarios and formulas are not a validated national index. Subsequent research should include accompanied route audits, abandoned travel plans and the costs borne by providers and travellers. Economic assessment should also go beyond construction expenditure: repeated calls to confirm a room, delays caused by unsuitable transfers and staff time spent on emergency assistance are potential hidden costs. Whether accurate information and advance arrangements reduce them remains an empirical question for local data.



Conclusion

Assessing inclusive tourism service quality requires attention to the entire journey rather than an isolated facility. This paper identifies six linked stages—discovery, booking, arrival, accommodation, experience and feedback—and proposes a barrier, responsible actor and observable check for each. Official sources from Uzbekistan document policy measures, programmes and a digital initiative, but their reported activities do not themselves measure equitable service use.

The practical recommendation is to test selected routes jointly under different access scenarios, connect public descriptions to verified conditions and use complaints to guide the next audit. This approach makes discontinuities between infrastructure, hospitality and digital information visible. Its effectiveness should be established through a subsequent, consistent field study.

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