

# Integrating universal design into sustainable tourism certification schemes

## Status and recommendations

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This study's main finding is that the schemes for sustainable tourism incorporate principles and criteria from standards on universal design (UU) to a limited extent. These schemes are mainly used by tourism companies and destinations in Norway, suggesting a possible gap in the application of universal design.

Similar to findings from studies on universal design in the transport sector, we also find that measures for universal design described in tourism-related UU-standards are primarily aimed at the physical environment rather than the organizational or social environment, and that people with reduced mobility, vision and hearing received more attention than other user groups. Moreover, a clear weakness is that both tourism related UU-standards and the schemes for sustainable tourism have far too little focus on the employees.

Nevertheless, we find several inklings in the analysis of tourism-related UU-standards regarding the breadth of measures and user groups covered. Although physical design measures gain a greater focus, there are several references to information, interaction and sensory measures. Moreover, we also observe that people with respiratory problems and cognitive impairments are referred to relatively frequently, compared to what has been done in previous research. Through the analysis, we were also able to identify new user groups and measure categories, adding to those identified and discussed based on previous research.

Our conclusion is that the analyzed schemes for sustainable tourism can benefit from integrating a wider range of user groups and measures described in various tourism related UU-standards. Based on this, we propose general recommendations to improve the integration of universal design into branding schemes for sustainable tourism, along with a set of 66 specific indicators across 16 criteria that encompass a wide range of types of measures. Collectively, these recommendations and indicators take into account different types of needs and address the configuration of the physical, social and organizational environment.

In this study, we have investigated whether and how schemes for sustainable tourism used by destinations and tourism companies in Norway integrate principles and measures proposed in Norwegian and international tourism-related standards for universal design. The analysis only relates to standards on universal design published by Standard Norway (SN) or the International Standard Organization (ISO) and sustainability label schemes used by tourism



companies and destinations in Norway. A further aim of the project has been to propose criteria and indicators that can be integrated into existing schemes for sustainable tourism, in order to contribute to place a greater emphasis on universal in tourism.

To achieve the goals, we have attempted to answer the following questions:

- Which principles and measures are recommended in existing standards for universal design? Are these aimed at specific user groups? If so, which ones? What do the measures focus on?
- To what extent are these principles and measures integrated into schemes for sustainable tourism used by the Norwegian tourism actors?
- Which criteria and indicators related to universal design are important to include in schemes for sustainable tourism?

Based on research on universal design from the transport sector and links between sustainability and universal design, we forwarded four hypotheses:

- Hypothesis 1: It is mainly the physical environment that is covered in the standards
- Hypothesis 2: It is mainly physical design that is covered by the standards
- Hypothesis 3: It is mainly people with reduced mobility, vision or hearing as well as children and people with prams who are mentioned in the standards
- Hypothesis 4: Schemes for sustainable tourism include criteria and indicators associated with universal design

Findings from the analysis of tourism related UU-standards support our first three hypotheses, while we found no support for our fourth hypothesis based on the analysis of the schemes for sustainable tourism: the most used schemes for sustainable tourism used by tourism business and destinations in Norway incorporate principles and criteria of universal design to a very little extent. This is surprising as universal design is considered an essential element for social sustainability, as well as has economic and environmental consequences.

### **Finding|s in line with previous research**

As expected, people with reduced mobility, vision and hearing are the user groups most frequently mentioned in the analyzed tourism related UU-standards (figure S1). Children and parents with prams are also frequently mentioned user groups. This is also in line with what we expected.

In view of previous findings from research on universal design in the transport sector, it is not surprising that physical design measures are the most discussed measures in tourism related UU-standards (figure S2). Physical design measures dominate across the user groups, with the exception of persons with hearing impairments, whose needs are primarily addressed through information measures. This type of measures is also often mentioned in connection with persons with visual impairments.

Although over half of the tourism related UU-standards that were analyzed mention both the physical, social and organizational environment, it is the physical environment that is addressed most frequently (figure S3). Again, this is in line with findings from studies on universal design in the transport sector.

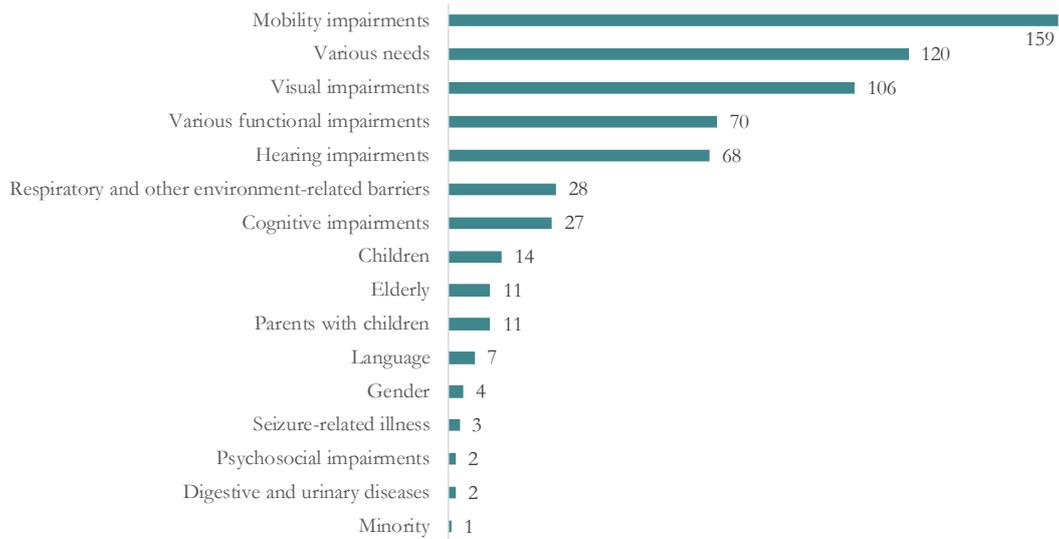


Figure S1: Number of references on each user group in standards.

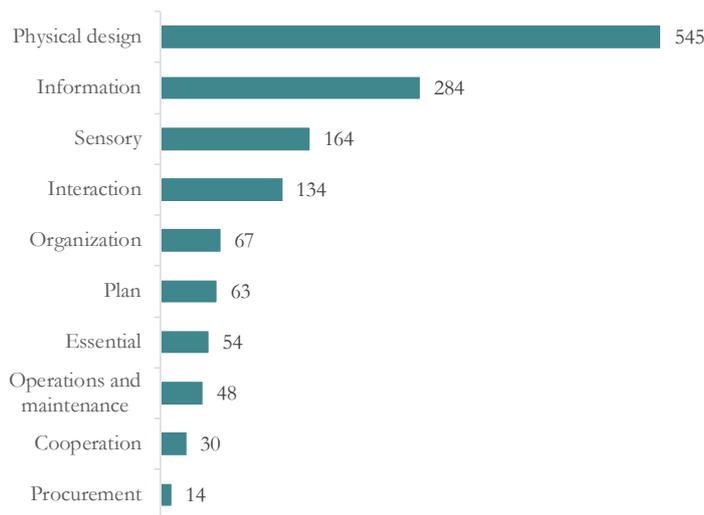
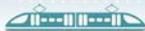


Figure S2: Number of references on each type of measure in standards.



Figure S3: Environments addressed in analyzed standards.



### **Little focus on certain user groups and measures**

Altogether, the standards that were analyzed in the project covered a wide variety of user groups and measure types. Nevertheless, we see that there are several user groups and initiatives that receive surprisingly little attention. User groups with gender and minority-related needs, seizure-related diseases and digestive and urinary tract diseases are very rarely mentioned. We also see that cognitive impairments are defined in many of the standards, while measures aimed at this user group are not as frequent as references to other user groups. The needs related to language and of the elderly are also relatively little discussed, considering the international nature of tourism and an ever-aging population.

A key finding from our analyses is references to employees are rare in both tourism related UU-standards and schemes for sustainable tourism. This despite the fact that universally designed workplaces are an important element in the development of a sustainable tourism industry, particularly from a social perspective.

Furthermore, we see that there is very little focus on measures related to procurement, collaboration and operation and maintenance. Essential measures linked to basic human needs are also not discussed to a large extent. Lack of focus on procurement and collaboration measures together with the greater focus on physical design, information and sensory measures that often address the physical environment contribute to the little focus on the organizational environment. References to the social environment are also modest, as this environment is addressed primarily by interaction measures. The little focus on both environments is unfortunate in a tourism context, in which experiences are based on human interactions and require collaboration between tourism actors.

### **Positive trends**

Despite weaknesses, we also find several bright spots thorough the analysis of both tourism related UU-standards and schemes for sustainable tourism. The fact that people with respiratory problems are referred to relatively often, compared to what has been found in previous studies, is very positive. The same applies to people with cognitive impairments – although these are mentioned somewhat more often in previous research. We also see that several tourism related UU-standards refer to "diverse" users, which is the most inclusive category, as we have defined it. It is also positive that the schemes for sustainable tourism refer to seizure-related illness – not least considering that these are not well covered in either current legislation or previous research.

Moreover, it is also positive that information and interaction measures are mentioned in almost all of the analyzed UU-standards, and that sensory measures are also frequently mentioned. The latter often appear in connection with user groups with visual and hearing impairments. Furthermore, although they are not among the most frequently mentioned measure types in terms of number of references across standards, we observe that several of the standards also mention planning and organizational measures – which are particularly important in the context of tourism, where the several different services are linked together to form comprehensive experiences.

### **Recommendations**

Our analysis shows that schemes for sustainable tourism can benefit from integrating a wider range of user groups and measures referred to in relevant tourism related UU-standards. Based on this, we propose 62 indicators across 16 criteria that can potentially be integrated into schemes for sustainable tourism in order to improve inclusion of universal design in their criteria and indicators. Our proposed set includes many different types of measures, taking into account different types of needs and address the physical, social and organizational



environments. Additionally, we have drafted the following recommendations for better integration of universal design in schemes for sustainable tourism:

- The definition of universal design should be inclusive
- All categories of guests and employees should be included when working with universal design
- Remember that everyone can benefit from implementation of varied types of measures (in addition to physical design measures)
- Facilitate user involvement and collaboration with suppliers
- Universal design requires planning and therefore it should be an integral aspect in the strategy of destinations and businesses
- Universal Design needs a holistic approach and should be made part of the entire tourism service chain
- It is important to ensure that information needs are met both before and during the trip