

## 2018 Web Accessibility Survey Report

### Executive Summary

#### Background

1. Nowadays, with the advancement of technology, visually impaired persons can use different assistive tools such as screen reader and braille display to surf the net and use online services. Visually impaired persons can also use screen reader to read the text on the screen in a computerized voice and braille display to read the text displayed on the computer screen in Braille. However, visually impaired persons would not be able to access information and online service such as online banking, payment and shopping, if the website is not well designed.
2. Hong Kong Blind Union has committed to eliminating digital barriers and promoting the accessible digital technology. We have conducted web accessibility surveys and held press conferences in 2010, 2012, 2014 and 2015. Once again, we have invited Dr. Yu-Cheung Wong, Associate Professor at the Department of Social Work, The Chinese University of Hong Kong, to advise on the survey design, implementation, and data analysis of the current study.
3. In order to further understand the overall situation of web accessibility in Hong Kong, funded by the Equal Opportunities Commission, Hong Kong Blind Union conducted a web accessibility survey between November 2017 and April 2018. 198 websites in Hong Kong were selected for testing, including websites of 70 public organizations, 27 members of the Legislative Council, and 101 listed companies.

#### Method of Testing

4. The criteria of testing are based on the Web Content Accessibility Guidelines (WCAG) 2.0, which are established by the World Wide Web Consortium (W3C). WCAG 2.0 is an international standard for web developers. (<http://www.w3.org/TR/WCAG20/>)

5. Two focus groups were conducted to collect the views of visually impaired persons to define the scope and the grading criteria of the testing. With the suggestions of focus group participants, the survey adopted 22 criteria of WCAG 2.0 which were then categorized into two levels: 12 basic criteria and 10 advanced criteria.
6. The entire testing was conducted by experienced reviewers, including totally blind, low-vision and sighted persons. Screen readers and screen magnifiers were used to evaluate and score each website systematically by stages. Websites were rated 0 as “not qualified”, 1 as “acceptable”, 2 as “good”, and N as “not applicable” according to each criterion. Advanced checking was conducted if the website achieved a score of 1 or above for all 12 basic criteria.

## **Results of Testing**

### ***Proportion of websites that meet the criteria***

7. Only 33 out of 198 websites (16.7%) met all 12 basic criteria, i.e. fewer than one-fifth. They included 23 public organization websites, 9 listed company websites, and 1 Legislative Council member website. These results showed a very unsatisfactory web accessibility level of Hong Kong websites.
8. Among the 33 websites which proceeded to the advanced checking, only 16 websites (8.0% of all tested websites) fulfilled all 12 basic criteria and 10 advanced criteria. 13 public organization websites met all above criteria and showed a relatively satisfactory performance. However, it was disappointing that none of Legislative Council member’s website met all the basic and advanced criteria. And there were just 3 listed company websites achieving all 10 advanced criteria.

### ***Average score of web accessibility***

9. As well as checking the proportion of websites meeting various criteria, each website was rated for web accessibility and scored from 0 to 2, with 0 as “not qualified”, 1 as “acceptable”, and 2 as “good”. The average score of web accessibility helps to reflect the actual accessibility level of the website.



10. Among 33 websites which fulfilled all 12 basic criteria, 10 websites scored 2 (full score). They included 7 public organization websites, 1 Legislative Council member website, and 2 listed company websites. In addition, out of 16 websites which met all 12 basic and 10 advanced criteria, 2 websites were given a full score of 2. In other words, there were only 2 websites that completely fulfilled the web accessibility criteria, i.e. 1% of all 198 websites.
11. The performance of listed company websites was the worst. There were 17 websites scored lower than 1 for basic criteria. Basically, most of those websites were difficult to access through a keyboard. The design of image and table did not meet the basic criteria of web accessibility. Therefore, visually impaired persons faced enormous difficulties in browsing these websites.

## **Conclusion and Recommendations**

### ***Conclusion***

12. From the results of testing (including the proportion of websites meeting web accessibility criteria and the average score given), some websites were disappointing, including public organization websites and Legislative Council Member websites. Indeed, some websites contained information that is closely related to the daily lives of the general public. However, visually impaired persons cannot understand images without text description; some websites are hard to operate through keyboard, which create obstacle for visually impaired persons and physically handicapped persons to access the online information and services. The Hong Kong Government should strengthen the promotion of web accessibility to ensure that the government information and services could meet the international web accessibility standard.

### ***Recommendations***

13. Our Union expects to have a more precise picture of Hong Kong web accessibility level through regular review on different kinds of Hong Kong websites, and give advice to the Hong Kong Government and industries to improve the development of



Hong Kong accessible digital technology.

14. Recommendations to the Government: First, our Union expects the Government to enhance the enterprises' and public knowledge and awareness about the importance of web accessibility through different activities, such as "Web Accessibility Recognition Scheme", and proactively encourage different organizations to improve their web accessibility. Second, in order to ensure persons with disabilities to enjoy equal opportunities to access online information, the Government should consider to promote the web accessibility design through different kinds of administrative measures under existing discrimination ordinances and to establish guidelines to require all websites to attain certain level of accessibility.
15. Recommendations to institutions of training IT professionals: IT industry could provide relevant training and incorporate web accessibility design into their curriculum.
16. Recommendations to listed enterprises and public organizations: Our Union expects more people to acknowledge the benefits of web accessibility through the current study. Enterprises and public organizations could not only expand their business market to persons with disabilities, but also enhance corporate image through achieving the web accessibility standard.

### ***Future development***

17. Universal design concept is becoming more popular. It is expected that more products could be used by persons with disabilities and non-disabled persons without additional adjustment. The goal of universal design is to consider user experience at early design stage and enhance user experience when using products or services.

