Office of the Government Chief Information Officer

What is Web Accessibility

Mr. Alex Yeung, Senior Manager Digital Inclusion Division 30 October 2012







- **1.** Web Accessibility and Common Pitfalls
- 2. International Standard and Government Practices
- 3. Web Accessibility Campaign
- 4. Web Accessibility Recognition Scheme

- Making website Content available for ALL
- <u>ALL</u> people in the society
- Including persons with disabilities (361,000 about 5.2% of total population)





- Persons with visual impairment cannot perceive the image content
- Persons with hearing impairment cannot perceive the audio content



- e.g. contain descriptive text alternative for image;
- provide text transcripts for audio and video



Common Pitfalls in Web Accessibility



2. Inaccessible PDF Files

Screen reader cannot read the content

Affected Group; All Persons with Disabilities

PDF documents should only be used for certain situations. This is generally when you have a piece of content that you would like people to download and read offline. In this way, PDF documents can be helpful for persons with disabilities because they can download and read them with the assistive functions built into PDF reading software.

We have to ensure that PDF documents are accessible to assistive technologies, such as screen readers. We should produce a PDF document from a text-based source document so that it is readable by Brailie devices used by persons with visual impairments. Image-based documents, such as TIF files produced by scanning, should be converted into text-based documents with Optical Character Recognition (OCR) software prior to producing the PDF document.

Affected Group: All Persons with Disabilities

PDF documents should only be used for certain situations. This is generally when you have a piece of content that you would like people to download and read offline. In this way, PDF documents can be helpful for persons with disabilities because they can download and read them with the assistive functions built into PDF reading software.

We have to ensure that PDF documents are accessible to assistive technologies, such as screen readers. We should produce a PDF document from a text-based source document so that it is readable by Braille devices used by persons with visual impairments. Image-based documents, such as TIF files produced by scanning, should be converted into text-based documents with Optical Character Recognition (OCR) software prior to producing the PDF document.

Scanned Image not accessible

Text-based accessible PDF

- e.g. use proper PDF generator to produce a PDF document from a text-based source document;
- ✓ use Optical Character Recognition (OCR) software after scanning





3. Text in Image is not accessible

Information is not conveyed to all

Seminar for Public Time: 2:30 - 5:30 pm Venue: Conference Hall, Central Government Offices

Seminar for Public

Time: 2:30 - 5:30 pm Venue: Conference Hall, Central Government Offices

Text in image

Accessible text on a webpage

Avoid to convey information of wide public interest

✓ If avoidable, provide descriptive text alternatives

Common Pitfalls in Web Accessibility

4. Small font sizes

• Persons with low vision cannot read the text

Home About Contact Services Support FAQ	Home About Contact Services Support FAQ
Resize text: Understanding Success Criteria 1.4.4 Some organisations may consider their websites to be "accessible" when the websites are easily found by search engines. However, the core principle of web accessibility is not about whether people "can find you", it is about whether all people, irrespective of age, race, education or disability, can access to information in websites.	Resize text: Understanding Success Criteria 1.4.4 Some organisations may consider their websites to be "accessible" when the websites are easily found by search engines. However, the core principle of web accessibility is not about whether people "can find you", it is about whether all people, irrespective of age, race, education or disability, can access to information in websites.

Cannot resize text

Can resize text

✓ e.g. provide resize text function

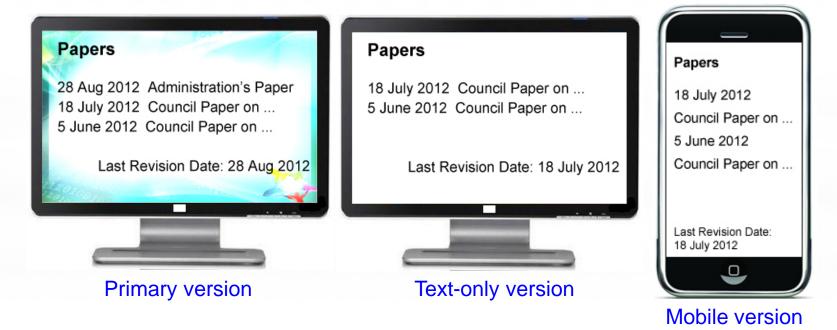


 Persons with low vision have difficulty reading text that does not contrast with its background

						ΑΑΑ							ΑΑΑ
indep oppor This H under succe webs	About able all peopl endently and tunity to mal landbook is d rstand the im ssfully impler ites to be "ac es. However,	participate ke informati lesigned for portance of nented. Son cessible" wh	in all aspect on accessibl senior exect web accessione organisat then the web	s of life, we e to all. utives and n bility and sl ions may co sites are ea:	should tak nanagers to now how it onsider thei sily found b	better can be r y search	indepe opport This H under: succes websit	andently and tunity to ma andbook is o stand the im sofully implea tes to be "ac	l participate ke informat lesigned for portance of mented. Sor cessible" wi	Services persons wit in all aspect ion accessibl senior exect web accession me organisat hen the web inciple of we	ts of life, we le to all. utives and n ibility and sh tions may co sites are eas	should take nanagers to now how it o onsider their sily found by	better can be y search
Poor background contrast				Eas	sier to	read	with	highe	er con	trast			
√ e	e.g. p	orovi	ide d	cont	rast	ratio	n of	at le	east	4.5	: 1		

Common Pitfalls in Web Accessibility





✓ Keep contents updated and in sync in different versions

 When primary version is accessible, text-only version may be removed



 Persons with intellectual disability have difficulty reading complex website structures



 e.g. provide simpler and ordered website structure F.

0

C

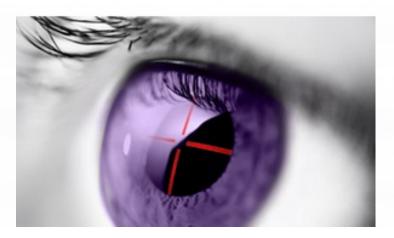
無障礙網頁

Web Accessibility Recognition Scheme

Common Pitfalls in Web Accessibility



8. Unable to skip inaccessible Adobe Flash and moving objects



✓ e.g. add a skip function







✓ e.g. add a turn off function

5

無障礙網頁





1. Web Accessibility and Common Issues

2. International Standard and Government Practices

3. Web Accessibility Campaign

4. Web Accessibility Recognition Scheme

International Standards



 Web Content Accessibility Guidelines (WCAG) have been developed over the years by the World Wide Web Consortium (W3C) consisting of people from industries, disability organisations, governments, and research labs from around the world

http://www.w3.org/WAI/

International Standards



• The WCAG consist of four parts —

4 Principles

12 Guidelines

61 Success Criteria

Many Techniques



4 Principles

- Content is **Perceivable**
- User interface components and navigation are Operable
- Information and operation are Understandable
- Content is Robust enough to be interpreted reliably by a wide range of web browsers, etc.



Principle 1 - Perceivable

• Sufficient colour contrast 4.5:1

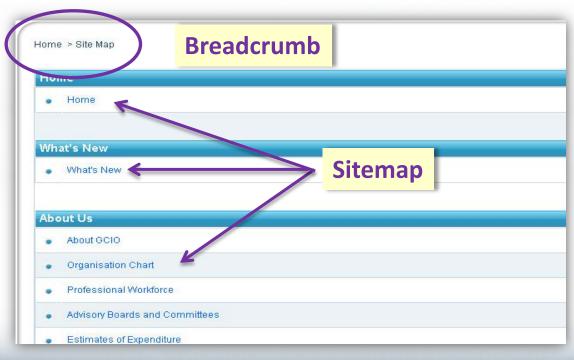


www.gov.hk



Principle 2 - Operable

 More than one way to help users navigate and find content





Principle 3 – Understandable

• Clear label with cue

3 4 P	în × ∶	e)		Q	_		
					A	AA	
Home	About	Contact	Services	Support	FAQ		
Online Form Name: Enter first and last name							
Pho	Phone: Enter phone area code and number						
		Submit					

Error identification

	♠× -	Q				
					AA	A A
Home	About	Contact	Services	Support	FAQ	
		orm numbers in John Smit		field]	
Pho	ne:	2345678x Submit	_]	



• Compatibility with browsers

Visitor browsers						
Brow	Perc. of Visits					
ø	Internet Explorer 8.0	32.1%				
ø	Internet Explorer 9.0	16%				
ø	Internet Explorer 7.0	13.8%				
0	Chrome 17.0	9.5%				
ø	Internet Explorer 6.0	9.6%				
١	Firefox 10.0	6.7%				
۲	Safari 5.1	4.2%				

www.gov.hk

5

無障礙網頁

C

Government Practices



- HK Government has been implementing web accessibility guidelines since 1999, based on a version of W3C WCAG
- HK Government websites, except archive materials, are required to conform to W3C WCAG 2.0 Level AA by 2013
- Encourage quasi-government and public service organisations to take corresponding action





1. Web Accessibility and Common Issues

- 2. International Standard and Government Practices
- 3. Web Accessibility Campaign
- 4. Web Accessibility Recognition Scheme



Web Accessibility Campaign

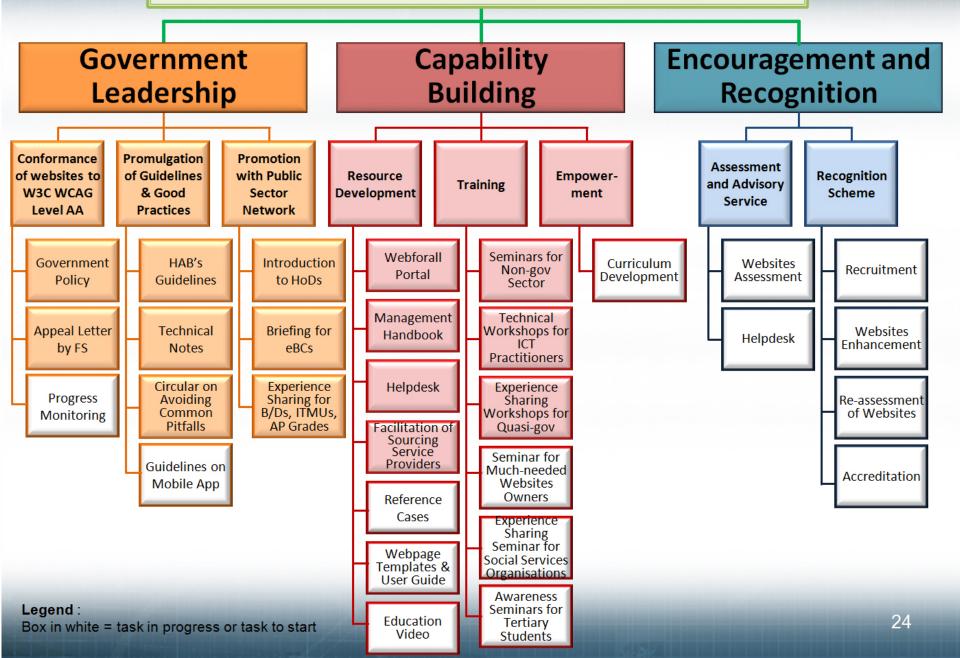
Objectives

- To facilitate access to online information and services for all segments of the community including persons with disabilities
- To promote wider adoption of web accessibility design in both public and private websites

Timeframe

• Campaign launched in October 2011

Web Accessibility Campaign

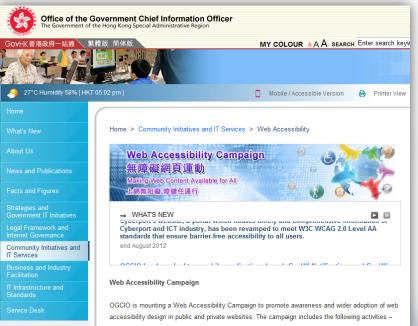


Web For All Portal



www.webforall.gov.hk

- Illustration examples of 26 success criteria (WCAG 2.0 Levels A & AA)
- Presentation slides of seminars /technical workshops held
- Government's best practices
- Management Handbook
- Web Designers' Corner
- FAQs



Management Handbook

○ 無障礙網頁 亮許計劃 Web Accessibility Recognition Scheme

- www.webforall.gov.hk
- Introduction and basic principles
- Top 10 concerns from persons with disabilities
- All WCAG 2.0 success criteria
- Success criteria checklist
- Testing techniques
- Introduction of testing tools



Seminars & Workshops



- Oct/Nov 2011 > Awareness Seminars for nongovernment sector
- Mar 2012 > World Internet Developers' Summit
- Apr 2012 > Seminars in Tertiary Institutions
- May 2012 > Workshops for ICT Practitioners
- Jun 2012 > Experience sharing for Quasi-gov IT







- **1. Web Accessibility and Common Issues**
- 2. International Standard and Government Practices
- 3. Web Accessibility Campaign
- 4. Web Accessibility Recognition Scheme

Web Accessibility Recognition Scheme

Objectives

- Recognise efforts and accomplishments in adoption of web accessibility design
- Further raise the awareness in the community and encourage adoption

Structure

- Co-organise with Equal Opportunities Commission
- Open to local businesses, NGOs, academia and quasigovernment organisations
- Not a competition or compliance audit

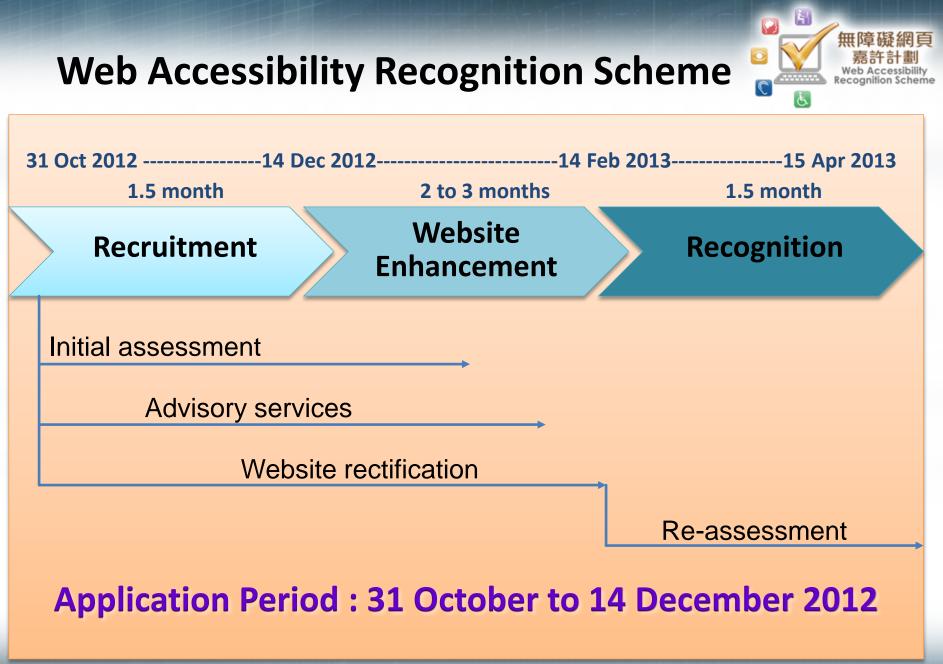
Web Accessibility Recognition Scheme

Two-tier Accreditation System

- 1st tier (Silver Award)
 - Websites incorporating basic web accessibility features
- 2nd tier (Gold Award)
 - Websites incorporating basic and key features
- Accreditation logos will be granted to awardees for display in their accredited websites
- The accreditation needs to be renewed annually







Let's join hands in making a digitally inclusive society Thank you!