### **Design Guide Definitions**

The e-government mobile standard framework provides the design guide for defining the basic principles, user and environment definitions and page layout

### **Basic principles**

Focus on the user experience. Concentrate on a few key functions. Consider device compatibility and scalability. Consider the accessibility of the IT-disadvantaged people. Develop in compliance with the web standards. Keep consistency. Use images limitedly. Remove the harmful elements of the mobile environment Optimize the web navigation.

## User and environment definitions

#### Users

The public mobile service is largely divided into the civil service and administrative service based on the user group.

The civil service is for all citizens of Korea. This means that the service should consider the ages, genders and even intellectual and social levels. But the individual services can target some specially defined user groups based on its purpose.

The administrative services are for the public servants.

## Mobile environment

The civil mobile service should be compatible between various user devices.

The mobile web is implemented by using HTML, CSS and Javascript.

The service is for full-touch smart phones and table PCs, but does not support the feature phones. For devices, not only the latest models but also the lower version model should be considered.

The basic resolution for the mobile device browser should be 320X480px and consider scalability as high-resolution smart phones continue to come out. In addition, since the smart phone's PPI(Pixel Per Inch) is higher than the LCD monitor's PPI(72ppi), you should check the resolution on the target devices rather than on the PC.

The mobile environment operates based on the tap events and therefore should be designed based on a sufficient understanding on the difference from PC-based web. For instance, you cannot use the frame format used in the PC web, as the scroll bar is not used on a page. In addition, touch-based devices cannot use the mouse rollover event.

The smart phone and tablet have the same UI principles, but differences in the screen resolution and layout. Currently the tablet PC's reference resolutions are 600\*1024px and 768\*1024px.

The tablets usually access the PC web sites rather than the mobile web sites, but some technologies such as Flash, GIF animation, video, etc are not supported on the tablets. Therefore in order to build web sites that consider the tablet environment as well as mobile web, it is recommended that the basic principles presented in the guide be complied with during development.

### Page Layout definitions

#### Components

Generally the screen is composed of the following components which can be combined to create various screens.

Indicator: service warning and receiving, network, battery status.

Header: logo or site name of the institute to deliver the site identity.

Navigation: key links such as home, previous pate or top menu. In the mobile web, this can be omitted as the browser navigation button is used.

Content: Information for users.

Button: use only if needed. The button is generally placed below the contents, but sometime at the top.

Footer: copyright, contacts, link to PC website, etc.



### **Basic Principles**

It is desirable that the header of a civil service will provide site name, logo or name of the institute that can expose the identity as a public service.

It is desirable that the footer of a civil service will provide the link to the PC version, if any, except the administrative services.

It is desirable that a web site with mobile services will provide link to the mobile version at the bottom

The footer will contain more summarized contents than the PC web site, considering small space.

It is desirable to apply a consistent layout per type to give a visual stability.

It is desirable to use a grid system so that contents can be well arranged.

The layout should be designed so that contents be easy to read and visually nice. The contents should be arranged after considering the use environment and visit purpose so that users can get the desired information easily.

In order to deliver the contents effectively, it is recommended that key content be placed in the location of high attention and attractive styles be used.

It is desirable to use space adequately for better view

# Mobile layout

## Contents suitable for the small screens

It is extremely difficult to convert all the contents in the PC web site to mobile version due to the physical restraints of the screen size. Therefore contents should be selectively converted. Since the mobile screen has lower readability than the PC screen when the same contents are loaded, the font should be larger and the content be smaller.

When too many contents are placed on the small screen, it is difficult for users to access their desired information. Long content should be divided in many pages.

## Portrait type layout

Since it is more convenient to scroll vertically on the mobile screen, the single-column portrait type layout will be the standard for the public service. But depending on the nature of the service, the landscape type layout could be the standard.









### Lists

## **Basic layouts**

The list type layout is suitable for civil and administrative services that contain lots of data.

This type is advantageous that it can show long text titles rather than thumbnails and can provide a relatively narrow structure of hierarchy.

Contents of the same level are arranged in an order based on a certain criteria.

If all the list items are not shown on the screen, provide part of items at the bottom to remind that there are more contents to come.

In order to express a hierarchical structure of a list, icons or bullets may be used for visual separation. 2

In case that it is difficult to bring all list items at a time, provide part of the list items and, if the user want more, provide more items. 3

In the edit mode, place a check box before the list or a delete button after the list to distinguish from the basic list screen. (4)



# Image type list (Gallery)

In this layout, the lists are shown in images.

This is applicable to a picture list or main menu on the screen.

If there are too many images, the scroll function or page navigation will be provided.

If used for menu, it is not desirable that there are too many menu items and a long scroll is required.

An image type menu requires design work per menu.

The number of images to be placed on the screen can vary depending on the image sizes and ensure that the image will be arranged evenly.

The details screen provides a function to enlarge/reduce images.

If converted to the landscape mode, expand menus so that there will no empty space in the right of the screen.







# **Indexed List**

Indexing is provided to the list type layout.

This is used when grouping is required, for example when there are many list items on a screen such as Contacts. This layout is advantageous that it can search for information easier than the list type and applicable to administrative services that handles large volume of information.

The index groups should be separated from and independent of each other.

This layout is not suitable for a menu with a deep hierarchical structure.

Index A	2011/05/31
• aaaaaaaa	• aaaaaaaa
• bbbbbbb	• bbbbbbb
• cccccccc	• ccccccc
Index B	2011/05/30
• baaaaaaa	• baaaaaaa

# **Tabbed List**

Under a tab button, lists are provided together. You can show multiple lists on a screen This is suitable for a list with categories and the tab name is used as a title for a list. Selecting a tab button will show the data of the associated list at the bottom and with the list of the first tab open in general.

This type is one of the most widely used, as a relatively lots of information can be navigated through on a screen.







## Search

## **Basic principles**

A search function is for users to access the wanted service in the civil/administrative services with huge information.

The search box is usually located in the top of the screen and sometimes they are located both in the top and at the bottom.

Enter a key word and click the button to get the results.

If there is only one piece of results, the details screen is provided for it and if two pieces or more, the list screen is shown and then the details screen is shown.

For a portal type civil service, it is recommended that the search function be provided in the top.



## Search provision

If the frequency of search is high, provide a search box in key screens. 1

If there are various search options and hence user settings, provide the search screen separately. 2

In order to secure the space for other contents, the search box will be taken out by the user when it is needed. 3



### **Text search**

Provide an input field for text input and a search button.

The search box will be provided in the top or it moves up to the top automatically when the key pad appears for text input.

Considering the convenience of users, initials search or search suggestions may be applied

