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# Assistive products — Guidelines on cognitive accessibility — Daily time management

*Produits d'assistance — Lignes directrices relatives à l'accessibilité cognitive — Gestion quotidienne*



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# Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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This document was prepared by Technical Committee ISO/TC 173, *Assistive products*.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.



# Introduction

The time-dependent society of today places high demands on every citizen. How we use and manage our time is of great importance for daily life including employment and other domains of participation and well-being. There are cultural differences in how time is understood and used, and performance can vary in differing environments. Time management behaviours relate positively to perceived control of time, job satisfaction and health, and negatively to stress. Children, adolescents and adults living with various types of impairment might need support with daily time management. People with limited ability to manage time show a heightened dependence on others and greater need for support, exacerbating their inferior status and vulnerability. This introduction summarises the concepts and research that inform this document.

The evidence for the effectiveness of cognitive assistive products supporting daily time management (e.g. reminder systems for adults with acquired brain injury) is strong. Time devices can be both digital and analogue and include both mainstream products like smartphones or alarm clocks, and assistive products. Time devices can compensate for a lack of time management skills, and can increase independence and participation. It is known that assistive products are not always used as intended, and that non-use is frequently associated with a decrease of independence in everyday activities.

People with cognitive impairment who find electronic planning devices beneficial tend to use them. People with cognitive impairment and a low level of daily time management who use advanced electronic planning devices tend to be more influenced by environmental factors, such as support from professionals and services. Well-designed electronic planning devices that are matched to the individual user's needs result in greater dependency on those devices of the user. In other words, greater usability of assistive products for time management is associated with greater independence of the user. Research has also highlighted the necessity of adaptation of electronic planning devices to the individual user, regardless of whether it is a mainstream product or a specifically designed assistive product for time management. Therefore, the more that producers of time devices consider making the products easy to understand, easy to manage and motivating (i.e. usable), the more benefit for the individual user, for his/her environment and for society. It is highly recommended to actively engage people with cognitive impairments in the development and evaluation of products used in daily time management.

Although termed cognitive 'accessibility', this document will also adopt the concept of 'usability' to ensure that design principles are based on the unique experiences of users rather than on assumptions of human abilities. Usability reflects a combination of dimensions of effectiveness, efficiency and satisfaction, so it is necessarily a more individual and subjective assessment than accessibility, incorporating psychosocial factors and perceptions of how well an environment enables participation and inclusion. Within this document, usability functions as a framework for specifying design goals and evaluating their achievement.

This document specifies guidelines that are relevant to creating a daily time management support system. It focuses on identifying the critical variables in the design and construction of products (and common exceptions) that affect their usability for people with cognitive impairment. The document provides directions on how to think when manufacturing a product, when giving support and service, and when matching the product to the needs of the person and the environment regarding daily time management. This is done by presenting examples of user needs in relation to daily time management functions followed by design recommendations. The categories are:

a) Time awareness;

b) Orientation to time;

c) Time management;

d) Adapting to time demands.

# Assistive products — Guidelines on cognitive accessibility — Daily time management

## 1 Scope

This document specifies principles of cognitive accessibility within the area of daily time management.

This document gives guidelines for design application for features and functions known to increase the accessibility of products and systems used to support daily time management for people with cognitive impairment regardless of age.

This document does not provide test methods and specific instructions for measuring and reporting.

NOTE ANSI/RESNA CA-1:2016 specifies features, measurement methods, and documentation for reporting the universal design specifications that support inclusion of individuals with cognitive impairment that might be applicable and beneficial to use for evaluating products and systems used to support daily time management.

## 2 Normative references

There are no normative references in this document.

## 3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at https://www.iso.org/obp

— IEC Electropedia: available at http://www.electropedia.org/

**3.1**
**adapting to time demands**
carrying out actions and behaviours appropriately in the required sequence and within the time allocated

EXAMPLE Running to the station when in danger of missing the train.

Note 1 to entry: See Reference [5].

**3.2**
**assistive product**
any product (including devices, equipment, instruments and software), especially produced or generally available, used by or for persons with disability

— for participation;

— to protect, support, train, measure or substitute for body functions/structures and activities; or

— to prevent impairments, activity limitations or participation restrictions

[SOURCE: ISO 9999:2016, 2.3]

**3.3**
**daily time management**
managing one's time (3.5) in daily life, both alone and along with others, and adapting to time demands

Note 1 to entry: This covers all aspects of managing time in daily routines and adapting to time demands, including socialized time in recurring daily activities e.g. school, employment carried out during weekdays or weekends, or leisure activities and less frequently occurring events like planning for a vacation.

**3.4**
**haptic**
relating to the sense of touch, in particular relating to the perception and manipulation of objects using the senses of touch and proprioception

Note 1 to entry: While there is no difference between *haptic* and *tactile* in most dictionary definitions, in the area of haptics, researchers and developers use *haptic* to include all haptic sensations, while *tactile* is limited to mechanical stimulation of the skin.

**3.5**
**managing one's time**
managing the time required to complete usual or specific activities, such as preparing to depart from home, taking medications, and accessing assistive technology and supports

Note 1 to entry: See Reference [4].

**3.6**
**orientation to time**
cognitive function that produces awareness of today, tomorrow, yesterday, date, month and year including temporal orientation within the past, present and future

**3.7**
**the quarter hour principle**
way of showing time in 15-minute units

**3.8**
**time interval**
amount of time between two specified instants, events, or states

**3.9**
**time management**
cognitive function of ordering events in chronological sequences, estimation of time needed to execute an activity, allocating amounts of time to different events and activities

Note 1 to entry: See Reference [4].

**3.10**
**time awareness**
subjective experience of the duration of activities

Note 1 to entry: This concept is similar to time perception. It includes intuitive time and knowing for how long to perform an activity and for how long to wait.

**3.11**
**user**
individual who accesses or interacts with a system

[SOURCE: ISO/IEC Guide 71:2014, 2.2]

# 4 Daily time management

## 4.1 General

Daily time management is how a person in daily life handles time. In the activity and participation domain in ICF-CY there are two categories considered as complementary aspects of "daily time management": "managing one's time" in daily life and "adapting to time demands". Activity and participation in these categories are facilitated by a person´s time-processing ability.

Assistive products can compensate for a lack of time-processing ability and/or modify one's activities or environment to facilitate daily time management.

For the purpose of this document the following functions are to be compensated for or facilitated:

a) Time awareness

Time awareness includes knowing, having a feeling or a sense of how long (or of how much time) different activities or events take. Also, knowing, having a feeling or a sense of how long (or of how much time) one should wait for the next activity or event. This is in the present, not in the future. "How long" is, in this case, not defined in time units (hours, minutes or seconds) but rather in regular intervals or on demand to meet the user's needs or preferences.

NOTE 1 Assistive products for time awareness can apply "The quarter hour principle" for compensation of time awareness, making the passage of time visible and understandable.

EXAMPLE 1 A Time Log has a row of light diodes, where many lit diodes indicate a long time and few indicate a short time.

EXAMPLE 2 Assistive products for time awareness could also include timer with alarm function.

b) Orientation to time

Orientation to time includes knowing how to use specific time concepts, like names of the weekdays or months, and to use devices like a calendar for orientation in time. The ability to use time representations allows to know the time of the day or night in hours, minutes or seconds.

The purpose is to know when activities or events will take place and/or to use information planned and provided by others.

NOTE 2 Assistive products for time orientation can apply compensatory interventions to support orientation to time, including the use of calendars, Quarter-hour watches, adapted calendars and other visual devices with or without pictures. They can promote orientation to the time of the day, date, week, month, season and/or year.

EXAMPLE 3 An automatic daily calendar is often used by people with dementia to help them find the day, date, week and/or year.

EXAMPLE 4 Interventions with pictures presenting daily activities in time order are well established for supporting children with autism. They provide an organized and predictable environment, and are also used for individuals with severe intellectual impairment.

c) Time management

Time management (as part of higher cognitive functions) includes knowing how to plan for and schedule different events and activities and the time in between. Time management also includes knowing how much time is needed for each activity and how to allocate the time needed.

The purpose is to use both time awareness and orientation to time to plan independently according to one's own preferences (what one must do and what one wants to do).

NOTE 3 Assistive products for time management can apply interventions to promote, develop and/or compensate for deficits in time management with a focus on scheduling skills.

EXAMPLE 5 Interventions to promote management of oneself might include the introduction of low-tech time devices (e.g. an adapted paper-based personal organizer), and high-tech time devices (e.g. software for mobile devices).

NOTE 4 Time management is an executive function depending on other executive functions, e.g. organization and other cognitive functions, e.g. calculation.

d) Adapting to time demands

Adapting to time demands includes knowing how to adapt to changes in schedule and to unexpected events disrupting one's previously planned time.

NOTE 5 Functions in assistive products could provide a "plan B" or a "plan of crisis" (alternative actions) helping to adapt to time demands. The examples of assistive products facilitating or compensating for time processing ability are aimed at increasing daily time management in general and specifically managing one's time. Therefore, adapting to time demands is presented as a separate category. There are few assistive products aimed at facilitating or compensating for adapting to time demands. These products would present different options to find alternative ways to adapt the plan made to fit the new situation, a "crisis management plan".

Time awareness, orientation to time and time management can be seen as one ability, operationalized as different hierarchical levels of complexity in time-processing ability. Time awareness is the basic level of time-processing ability followed by orientation to time and time management being the highest level of time-processing ability. This is reflected in childhood development, where children first learn which activities take a long or short time before learning to orient themselves to time using information from a clock or calendar and subsequently also to acquire the cognitive skill of time management making their own plans of how to use their time. Youth and adults with cognitive impairment as well as elderly people or people with dementia might have moderate or severe difficulties in time-processing ability and thus difficulties with daily time management.

It is important that the design is familiar to persons with cognitive impairment, for example after acquired brain injury, and that it requires minimal new learning as they often have problems with new learning. To be accepted it is important that the design is attractive, modern and consistent with the users' life style. The design should be neutral and not stigmatize or make the user seem different in some way.

The next section is structured as follows, a presentation of how problems in time awareness, orientation to time, time management, both in managing one's time and in adapting to time, might be compensated for, or prevented through the use of assistive products. For each concept, there is at least one case described, with the needs of a person and a variety of design recommendations and of desired outcomes. The aim of the structure is to guide the reader in how to think, starting with a person and the function to be compensated for, then the needs of that person as a potential user of a product.

Examples of possible outcomes for a person using the assistive product are presented in Annex B.

## 4.2 Time awareness

### 4.2.1 To be aware of the passage of time

In this case, a person has little sense of time and does not know how long something will take to do, or for how long to wait before starting or ceasing an activity. This could impact on the subjective experience of the duration of activities.

#### 4.2.1.1 User needs

Some users need greater specificity regarding passage of time:

a) to understand the duration of activities, for example "Is it a long or short time left to continue with a task, or an activity?";



b) to understand a specific length of time, for example “How long is my break or for how long must I wait?”;

c) to understand the length of time, or time until the start or end of an event, e.g. “How long is it until the next important event takes place?”;

d) to understand the time of day, for example “is it still night time?”.

#### 4.2.1.2 Design recommendations

##### 4.2.1.2.1 Provide options that indicate decreasing time intervals

Time intervals are shown graphically as dots (Figure 1), bars or as a surface (Figure 2) fading or diminishing to show time passing. Time intervals can be divided into different steps for example 2,5 or 15 minutes.

EXAMPLE 1 Time displayed graphically as dots (Figure 1), one dot for each quarter of an hour as light-emitting diode (LED) that is unlit at the passing of time, one for each quarter of an hour until the time interval is completed. Set intervals, e.g. as dots, are easier to perceive.

**Figure 1 — Example of dots representing the remaining amount of time out of one hour**

EXAMPLE 2 Each of four quadrants of a circle, capable of being illuminated separately; dimmed one-at-a-time in an anti-clockwise direction in 15 minute-intervals, see Figure 2.

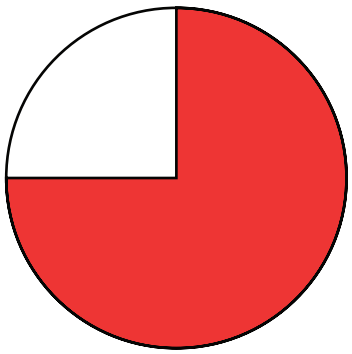


**Figure 2 — Example of surface that increase**

EXAMPLE 3 A clock face with a surface decreasing in clockwise direction in 5-minute intervals, see Figure 3.

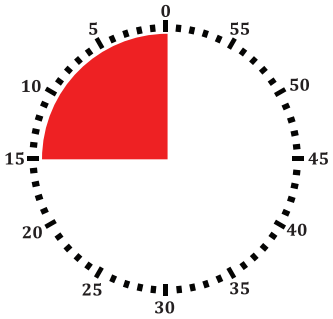



**Figure 3 — Example of surface that decreases**

#### 4.2.1.2.2 Provide options that indicate increasing time intervals

Measured time is visualized graphically as dots (Figure 4), bars or a surface that increases in numbers or size. For example: A watch that makes it possible to measure time as dots, the number of lit dots increases until the activity is finished. How many dots does it take to do the things I usually do?

**Figure 4 — Example of dots in minutes that increase**



NOTE Increasing time intervals are used when measuring time, whereas decreasing time intervals are used to illustrate a count down.

#### 4.2.1.2.3 How time can be indicated using different modalities

a) Visual

   — Bar that increases or decreases in fixed steps

b) Visual or Haptic

   — Surface that increases or decreases in size (See Figures 2 and 3)

c) Haptic feedback

   — for example Vibrations indicating certain time intervals

d) Audio

— Sound Impulses, for example sounds indicating continuous passing of time

— Audible alert for example a different sound designated for certain intervals, like a chime sound or a specific bird song for each hour

e) Voice or text (long time, short time)

## 4.3 Orientation to time

### 4.3.1 Orientation to time to know when activities or events will take place

In this case, a person cannot orient him or herself with a watch or an ordinary almanac/calendar/planner (analogue or digital).

#### 4.3.1.1 User needs

a) to orient to time, where one is in the day, date, week, month, season, year, for example "when shall I…?"

b) to know when next important activity takes place, for example "How many days until next visit to the cinema?"

c) to know when current activities need to be finished, for example "How much time is left/how many activities are left to do until it is time to…"

d) to know whether it is appropriate time of day or night for particular activities, for example "Can I call my friends now, can I contact a person, play loud music now?"

e) to see events planned/scheduled for the future, for example "When is my next birthday?" or "When are we going on that trip?"

#### 4.3.1.2 Design recommendations

##### 4.3.1.2.1 Provide options for representing different time concepts

Time concepts can be represented using different modalities:

a) Visual:

— Symbols, colours, text, characters or numbers for each day of the week;

— Symbols, colours, text, characters or numbers for months;

— Symbols, colours, text, characters or numbers for seasons.

b) Audio:

— Different sounds or earcons for each day of the week, or months, or seasons.

c) Haptic:

— Different surfaces, or different vibrations for each day of the week, or months, or seasons.

d) Olfactory:

— Each day of the week is represented by a different aroma.

#### 4.3.1.2.2 Use established conventions where possible and appropriate

EXAMPLE for examples from different countries see Annex A (use of colours, use of symbols, etc.).

#### 4.3.1.2.3 Provide options representing time in a calendar

In a calendar, time can be represented using different modalities:

a) Visual:

- Today is highlighted, other days not;
- Only today is visible or indicated;
- Time passed is de-emphasized for example grey or pale or not is not available/not visible;
- Coming time is in another colour;
- Overview over week, month, year;
- Only one day/page;
- The date of today is displayed;
- There is a “go to today-button” that, when activated, indicates the day/date;
- A “go to today-function” that activates automatically after a set time;
- Time, day, date, month, season and/or year is automatically changed.

b) Audio:

- Today’s date and weekday name can be set to be read out aloud automatically.

c) Haptic:

- A surface that changes texture as the time passes, or past time is indicated with a different texture;
- Vibrations change over a surface to indicate time past, and time to come.

#### 4.3.1.2.4 How activities/tasks can be indicated in a calendar

a) Visual:

- Photo;
- Symbols of different kind (for example Pictograms);
- Symbols, characters and text;
- Use of Colour.

b) Audio:

- Text with support of speech;
- Speech;
- Sounds: beeps, chimes to indicate something needs to be done (for example sound ship’s siren to indicate travel by ferry on that day).



c) Haptic:

— Use of different types of surface texture in a calendar, for example soft textures to indicate time to sleep or rest;

— Use of different vibrations when touching a calendar to indicate tasks.

### 4.3.2 To know time within the day or night

In this case, a person cannot manage orientation to time by using an ordinary time display like a watch or a clock (analogue or digital).

#### 4.3.2.1 User needs

a) to know if it is day or night or the time of day, for example “Is it morning, midday, afternoon, evening or night?”.

b) to know the time of the day, for example to know exact clock time of the day “What time is it now?”.

#### 4.3.2.2 Design recommendations

**4.3.2.2.1** Provide representation of the time period of the day and of the night or part thereof and the specific events or intervals within it.

The time period of the day and of the night can be represented using different modalities.

a) Visual:

— Time columns for day and night in different colours;

— Point or line in time column;

— Actual time is pointed out by a line that moves over hours in a day;

— Pictures of daily activities in a sequential order for example mealtimes structuring the day;

— Orientation within the day is supported by marking the activities that have passed in different colour or not displaying them.

b) Audio:

— Sounds or audible speech marking the beginning and end of the time period or a specific point in time.

c) Haptic:

— vibrations marking the beginning and end of the time period or a specific point in time.

**4.3.2.2.2** Provide alternative ways to express time.

Time can be expressed using different modalities.

a) Visual:

— Provide options to transfer analogue to digital time, vice versa or a presentation of both simultaneously;

— Provide text descriptions that emerge at certain times.

b) Audio:

Time can be expressed verbally as:

— 12:15;

— Quarter past twelve;

— Quarter past twelve in the afternoon;

— Date and/or the day of the week;

— Recorded speech.

c) Haptic:

— Vibrations for example different types to represent different entities, and use of different types of textures on surfaces.

## 4.4 Time management

### 4.4.1 To estimate time needed for activities

In this case, a person cannot estimate how long activities will take to do, calculate how much time remains, or determine whether there is enough time for an activity.

#### 4.4.1.1 User needs

a) to know the duration of one activity or several activities.

b) to measure own time, duration of activities, for example “How long time does it take to do things I usually do?”.

c) to know how long it is until a planned event, for example “How much time is left until the next important event?”.

d) to know how much time to allocate to specific activities., for example “What will I have time to do/ which activities can I choose from this Saturday afternoon?” or “Which activity takes 2 hours/four quarter-hour dots or less?”.

e) to know how much time to allocate to prepare an activity, set up time, and the time needed between two activities.

#### 4.4.1.2 Design recommendations

**4.4.1.2.1** Provide options to measure time in minutes or hours by indicating time that increases.

Time can be measured in seconds, minutes and hours, in alternative ways, using different modalities.

a) Visual:

— Digits counting up as time passes like a stop watch (for example in a graphical display with dots).

b) Audio:

— Speech counting up.

c) Haptic:

— feeling the dots or a surface changing to represent counting up.



**4.4.1.2.2** Provide options to indicate time that decreases.

Digits counting down remaining time in minutes can be represented in different modalities.

a) Visual:

- The Quarter Hour Principle — shows the unit quarter as dots;
- Blocks of time, associated with recurring activities, for example blocking time in a calendar or physical blocks representing the duration of the recurring activity;
- Discrete intervals that indicate a proportion or an amount of time, see Figure 3;
- A "lexicon" with self-measured activities with the duration of the activity in dots.

b) Audio:

- Counting down time verbally, using other sounds/words to show the duration (for example using the medical profession's method of ticking off the seconds by saying mentally, elephant-one, elephant-two, etc.)

c) Haptic:

- Using vibrations that show time counting down, (for example vibrations that get progressively shorter);
- Using surfaces that change as countdown progresses.

**4.4.1.2.3** Provide options to represent how much time each activity or each block of activities will take to complete.

Try planning ahead time needed between two activities. Provide options to planning in advance, the time needed between two activities.

EXAMPLE Occupying the space in a calendar equal to the duration of the activity.

### 4.4.2 To structure one's daily routines

In this case, a person has problems structuring his/her duties/daily routines independently (step-by-step, task sequencing).

#### 4.4.2.1 User needs

a) to handle priorities of activities or tasks to structure his/her daily routines.

b) to have a distinct structure that allows sequencing of activities over time, for example "In what order is it best to do these activities, when and for how long shall I do each activity?".

c) to have a distinct structure that allows sequencing of tasks within one activity, for example "In what order is it best to do this task, step-by-step, and when and for how long shall I do each task?".

d) to have a structure that supports recalling the required sequence of steps.

EXAMPLE A shower-schedule with clearly differentiated steps to facilitate independence.

#### 4.4.2.2 Design recommendations

a) Provide options to show each activity or task.

b) Provide options to check off every activity or task.

c) Provide options to get the information repeated.

d) Provide options to get information separated into manageable parts.

e) Provide options to facilitate the structure.

EXAMPLE How a daily routine/sequence of activities can be indicated:

a) Visual:

— Photo, video, animated sequence.

— Symbols including Pictograms.

— Symbols and/or text.

b) Audio:

— Text supported by speech;

— Speech: saying out loud a step-by-step schedule.

c) Haptic:

— Textures, surfaces, vibrations to denote a step-by-step schedule.

### 4.4.3 To plan when to do things

In this case, a person is unsure/forgets what needs to be done and when it should be done.

NOTE Can also relate to memory [ICF b144] or higher-level cognitive functions [ICF b164].

#### 4.4.3.1 User needs

To be reminded when and where an activity shall be done. Different reminders can be necessary at different intervals and in different ways.

#### 4.4.3.2 Design recommendations

a) Provide reminders when to initiate an activity.

b) Provide reminders when to finish an activity.

c) Provide reminders to a certain activity, for example Reminders of medicine.

d) Provide different reminders when to perform weekly and monthly planning.

e) Provide reminders linked to date or location or to where the activity takes place.

f) Provide reminder when to prepare for an activity.

g) Provide different kind of reminders to different activities.

EXAMPLE 1 How reminders can be displayed or represented:

a) Visual:

— Images or symbols, text and/or images with text and flashing light.

b) Audio:

— Synthetic speech;

— Recorded speech.

c) Haptic:

— Vibration.



EXAMPLE 2 How reminders can be adapted:

a) Alert before the reminder;

b) Automatic voice;

c) Verification;

d) Snooze functions;

e) In one step or in two steps (first a signal, then a voice or a picture);

f) Escalating reminders;

g) Repeated reminders.

NOTE 1 Consideration can be given to how many reminders in one day are feasible for a given user.

NOTE 2 Consideration can be given to whether to use the same or different sorts of reminders.

### 4.4.4 To plan and manage time for undertaking multiple tasks

In this case, a person cannot plan and manage time to undertake multiple tasks, for example “When do I have to leave to be on time?”

#### 4.4.4.1 User needs

a) to plan his/her time through use of an ordinary planner / schedule / calendar, for example “How do I plan the day and week to have just enough to do, not too much and not too few activities, within a certain amount of time”.

b) to plan certain events or activities that require a lot of steps to be done within a certain timely order, for example planning for a birthday party or a trip.

#### 4.4.4.2 Design recommendations

a) Provide options to evaluate previous planning in time, for example "What have I done, was it enough time for each step?".

b) Ensure support so that the user does not get confused by looking at past history.

c) Provide help for prioritizing.

EXAMPLE 1 How the planning can be accomplished. It can be helpful to give focus on what time span is central, e.g. here and now, two steps (now and later), half day/day/week/month/year by:

a) Visual:

— Photo;

— Symbols and Pictograms, Symbols and/or Text;

— The time-length of an activity is visualized by its physical length in the calendar;

— Colour for different types of activities.

b) Audio:

— Text supported by Speech;

— Speech.

c) Haptic:

— Objects;

— Tactile symbols.

EXAMPLE 2 If a list of activities, such as a ”to-do-list”, is long, and time is insufficient, provide help, e.g. a few alternatives to choose from in order to prioritize.

It should be possible to share the digital calendar with an informal caregiver who could help the person with cognitive impairment to plan the days and set up reminders (appropriate mode for example alarm and text message).

## 4.5 Adapting to time demands

### 4.5.1 To adapt to time

In this case, a person cannot adapt to time when plans change or in response to changes that affect or disturb the plans made.

#### 4.5.1.1 User needs

a) to be notified of/or forecast factors influencing the plans, for example if there is a need to hurry up or slow down what the person is doing within the time allocated.

b) to get support for making alternative solutions, for example if the person runs out of time and needs to make a choice between solutions within the time allocated.

#### 4.5.1.2 Design recommendations

a) Provide real time monitoring.

b) Provide feedback from the schedule when plans are disrupted.

c) Provide dynamic schedule/flexibility.

d) Show a decision tree, display options.

e) Provide help when you run out of time. Give choices between solutions.

f) Help to prioritize:

1) What can be done later;

2) What can be deleted;

3) What can be done in shorter time.

g) Provide a crisis plan: briefly this is a plan, in a physical (e.g. paper) or immaterial (e.g. digital) format that outlines what to do in a crisis.



# Annex A
(informative)

# Various examples of design applications

## A.1 Examples of colours for the days of the week

Weekly schedules with these different colours on different days have become an unofficial standard in Sweden for many years, see Figure A.1. The colours are used in both paper format and applications in mobile devices.

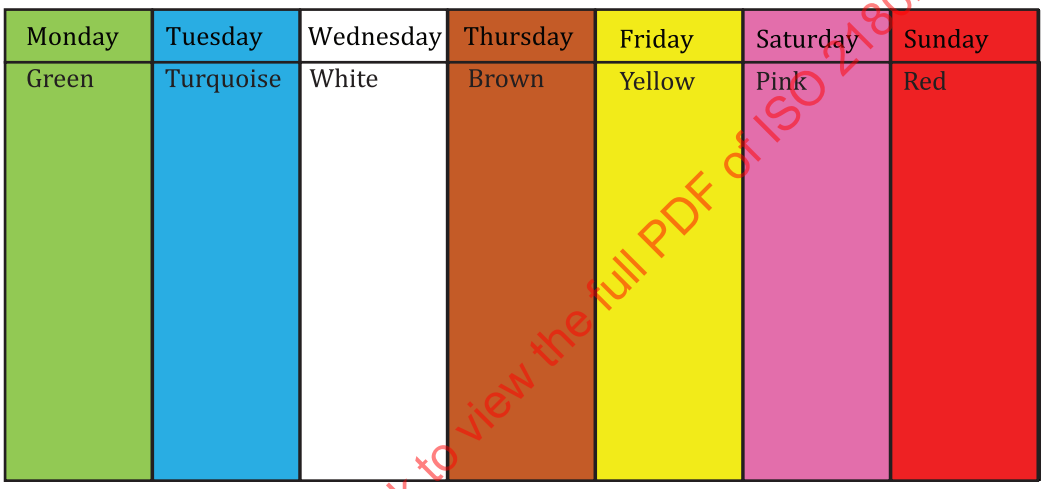
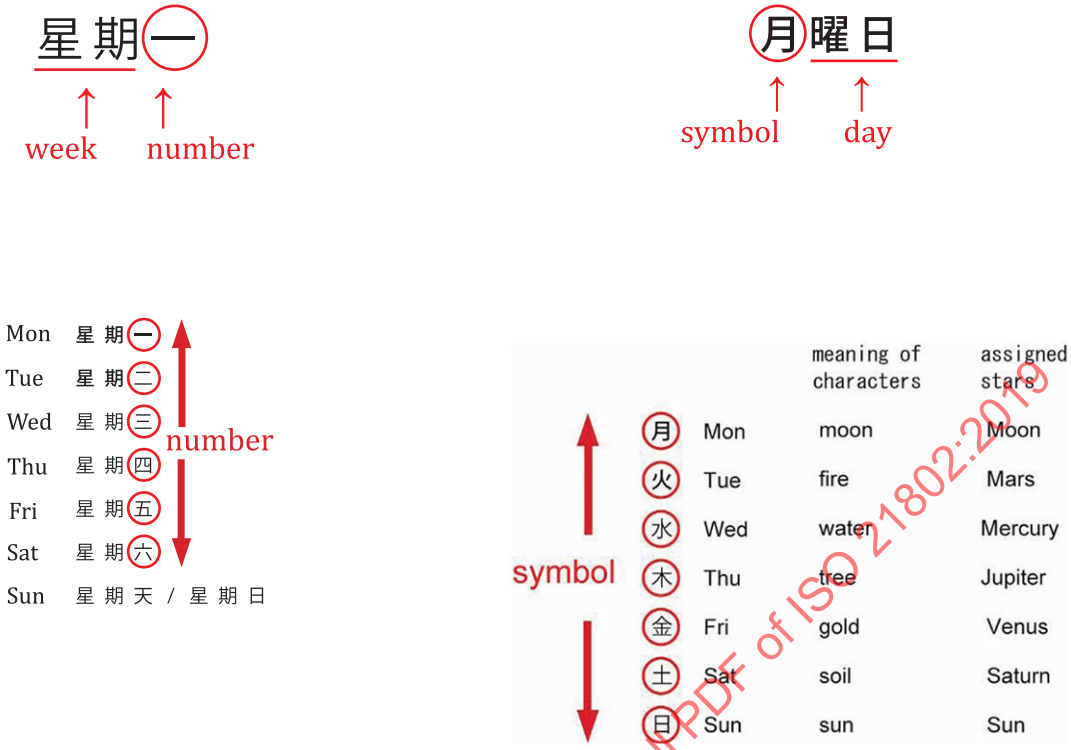



**Figure A.1 — Colours for the days of the week, used in Scandinavia**

## A.2 Examples of numbers and symbols for the days of the week

Figure A.2 illustrates examples of numbers and symbols for the day of the week used in China and Japan respectively. Example of timetables are presented as Table A.2 and Table A.3.




a) China b) Japan

**Figure A.2 — Examples of numbers and symbols for the days of the week in China and Japan**

**Table A.2 — Example of timetable used in China**

| 时间 / 类别 | | 星期一 | 星期二 | 星期三 | 星期四 | 星期五 |
|---|---|---|---|---|---|---|
| 上午 | 第一节 | | | | | |
| | 第二节 | | | | | |
| | 第三节 | | | | | |
| | 第四节 | | | | | |
| 下午 | 第五节 | | | | | |
| | 第六节 | | | | | |
| | 第七节 | | | | | |

**Table A.3 — Example of timetable used in Japan**

| | 月 | 火 | 水 | 木 | 金 |
|---|---|---|---|---|---|
| 1 | | | | | |
| 2 | | | | | |
| 3 | | | | | |
| 4 | | | | | |
| 5 | | | | | |

## A.3 Example of digital daily calendar

A digital daily calendar is a page-a-day calendar displaying the date with big letters, day of the week and time. It automatically changes the date and day of the week every day. Comparing to white wall, some digital calendars have a conspicuous frame to help them attract the attention of people with dementia.

A digital daily calendar supports them to find the date and day of the week easily.

The features of digital calendars are:

a) displaying simply the date and day of the week (some of them display time too)

b) displaying the date with large numbers

c) showing good contrast which is highly visible

d) displaying weekday and weekend in different colours

NOTE Coloured calendars might not be appropriate for all persons.

See Figure A.3.

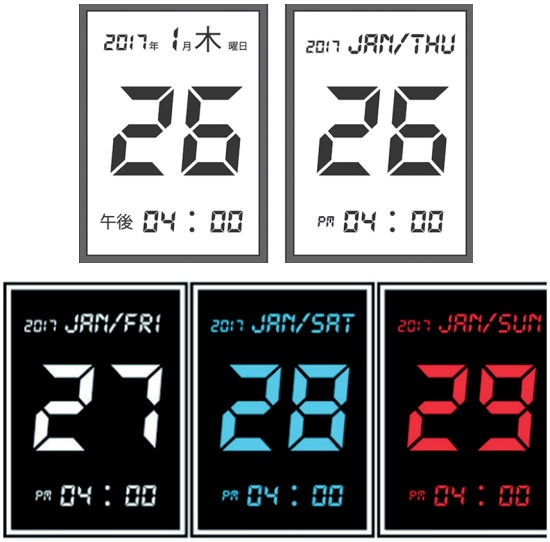



**Figure A.3 — Example of a digital daily calendar**

## A.4 Example of representation of the time period and the specific events within it

Figure A.4 illustrates a homemade solution for representation of the time period and the specific events within it.


**Figure A.4 — A homemade solution to indicate times for activities**

## A.5 Example of a representation of time in a calendar in street signage

Figure A.5 illustrates an example of representation of time in a calendar in street signage providing clear information of parking rules by day type and time.