

## 16. MODULE Telework

- Introduction
- Data
- Report and recommendations





## INTRODUCTION

**Scope of application.** The *Telework* module makes it possible to analyze the ergonomic conditions of the jobs performed in the telework mode.

This procedure is applicable to workstations which involve teleworking (remote work carried out exclusively or mainly by using computer, telematic and telecommunication means and systems) both regularly (more than 30% of the working day in a 3-month period) and not regularly.

The procedure allows the user to perform *individual* analyses to assess the ergonomic conditions of a specific telework workstation, and *collective* analyses to obtain joint information from several workers.

**Content.** The module is based on a data collection questionnaire. This questionnaire can be completed by the worker at home or by technical staff or the prevention service. The questionnaire consists of several sections with information related to the description of the telework workstation: identification, general data, and specific data (chair, table, screen, computer, accessories, space, environment, and organization). Based on the data collected, the software identifies the aspects that may pose risks, problems or possibilities for ergonomic improvement.

In addition, the module offers **recommendations** to help control the risks detected in the analysis.

**Source.** The module is based on a revision of the documents about ergonomic risk assessment in teleworking, on the reference standards (ISO series 9241, ISO 8995, ISO 7730, UNE-EN-29241.3 and EN-1335-2), technical documentation (Technical Note of Prevention 602, and the Technical Guide for the Assessment and Prevention of Risks Associated with the Use of Display Screens Equipment [2021]), and on the related legislation (Act 10/2021 and Royal Decree 488/1997).

## DATA

### Overview of the procedure

This procedure is applicable to workstations which involve teleworking.

The procedure makes it possible to analyze the ergonomic conditions of individual workstations and/or several workstations that are grouped under the same analysis.

The information of each workstation can be entered manually in the application (when the evaluation is performed by a technician) and/or be imported from the *Questionnaire manager* files (when the questionnaire(s) are completed by the workers).

In all cases, the analysis will be created by entering the data of the workstation type, company, and date.

If the questionnaires come from the data collected by the workers, these will be imported directly into the analysis. Then, the technician or the prevention service will review and validate the imported information.

If the workstations are analyzed by technical staff, the information is entered in the application by following these steps:

1. Entry of general data (identification data).
2. Entry of data from Level I questionnaire.
3. Entry of data from Level II questionnaire (the questions of this questionnaire will be different depending on what was answered in the Level I questionnaire).
4. Check the results.

## Operation of the module

First, the *Telework* module is selected in the *New Task* window (Figure 1).

This opens the main window of this module (Figure 2), where the data are entered and/or imported.

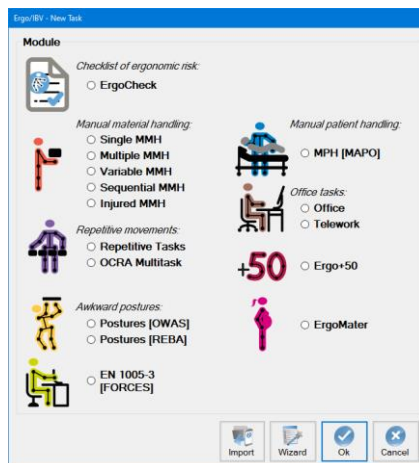


Figure 1. Access to the Telework module

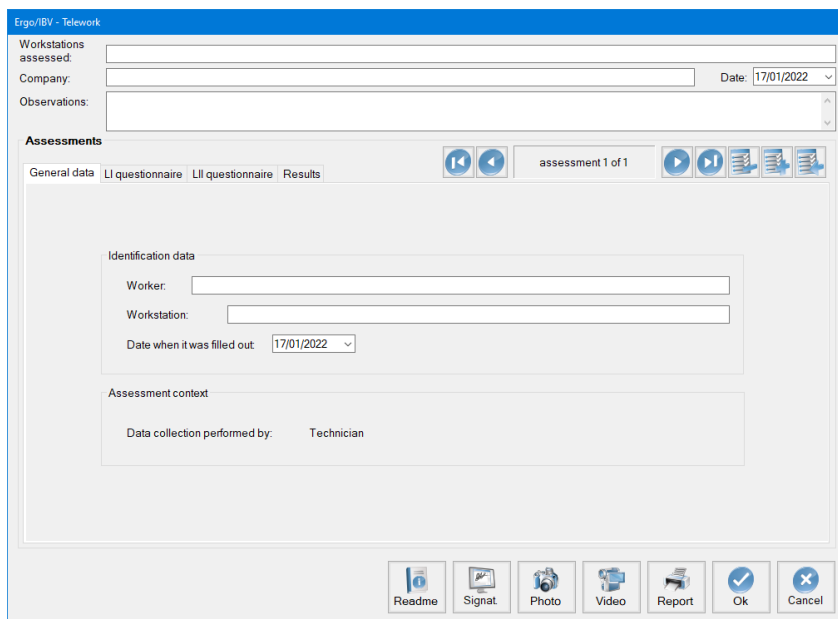


Figure 2. Telework – Main window

**Identification.** In the header, the user enters an identification name for the workstation or workstations assessed, the name of the company, date of the analysis, and any relevant observations.

**Assessments.** This section is a database where the different questionnaires of telework workstations are stored grouped in the same case.

The questionnaire database is controlled with the button bar located in the upper right area of the window (Figure 3):

- The bar shows the number of the active questionnaire (with respect to the total of questionnaires in the current case) and includes buttons to scroll to the other questionnaires of the case (first, previous, next and last).
- The *Delete* button is used to delete the active questionnaire after asking for confirmation.
- The *Add* button prepares the window to enter a new questionnaire.
- The *Import* button is used to add questionnaires that have been previously completed by the workers by using the *Questionnaire manager* tool [see chapter 3 of this manual]. It opens a window that allows the user to select an import file (with an **.xml** extension) to automatically incorporate the data into the current case.

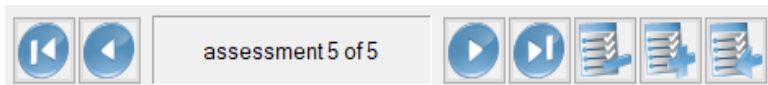


Figure 3. Control bar for the questionnaires of a case

### General data

The identification data are entered in each questionnaire (Figure 4):

- name or acronym of the worker,
- job performed, and
- date when it was filled out.

In addition, the application includes the following information:

- Data collection performed by:
  - "Worker" if the questionnaire has been completed by the worker and imported through the questionnaire manager.
  - "Technician" if the questionnaire is going to be completed by a technician directly in the application.

- Assessment conditions accepted by the worker on: dd/mm/yyyy
  - If the questionnaire has been completed by the worker, the application indicates the date on which the questionnaire was completed and on which the assessment conditions were accepted.

The screenshot displays the 'Ergo/IBV - Telework' application window. At the top, there are input fields for 'Workstations assessed:' (containing 'Telework section X'), 'Company:' (containing 'ABC'), and 'Date:' (set to '18/11/2021'). Below these is an 'Observations:' field. The main section is titled 'Assessments' and contains a tabbed interface with 'General data', 'LI questionnaire', 'LI questionnaire', and 'Results'. The 'General data' tab is active, showing 'assessment 5 of 5'. It includes an 'Identification data' section with fields for 'Worker:' (M.C.P.), 'Workstation:' (Technician), and 'Date when it was filled out:' (12/10/2021). Below this is an 'Assessment context' section with 'Data collection performed by:' (Worker) and 'Assessment conditions accepted by the worker on:' (12/10/2021). At the bottom, there is a row of icons for 'Readme', 'Signat', 'Photo', 'Video', 'Report', 'Ok', and 'Cancel'.

Figure 4. Assessment questionnaire - General data

The assessment itself consists of two levels that must be filled in sequentially.

### LI questionnaire

First, the items included in the LI questionnaire tab are filled in (Figure 5). There are 7 questions to describe some basic aspects of the telework workstation (Figure 5). The questions can be:

- Drop-down lists to select a single option.
- Multiple choice boxes that allow the user to check one or more of the available options.

All the questions must be answered to access the following questionnaire.

Ergo/IBV - Telework

Workstations assessed:

Telework section X

Company:

ABC

Date:

18/11/2021

Observations:

Assessments

General data

LI questionnaire

LII questionnaire

Results

assessment 5 of 5

Do you have a specific space in the house set up as an office space to telework?	<div>No</div>
Indicate the type of tasks that you perform most frequently (you can check several tasks)	<div><div><input checked="" type="checkbox"/> Computer use: office IT tasks</div><div><input checked="" type="checkbox"/> Computer use: graphics tasks</div><div><input checked="" type="checkbox"/> Computer use: design tasks</div><div><input checked="" type="checkbox"/> Telephone use</div><div><input checked="" type="checkbox"/> Meetings</div><div><input checked="" type="checkbox"/> Tasks with documents</div></div>
Indicate the type of chair you use	<div>Office chair, adjustable</div>
Indicate the type of computer equipment you use (you can check both)	<div><div><input checked="" type="checkbox"/> Desktop computer</div><div><input checked="" type="checkbox"/> Laptop</div></div>
Indicate the number of monitors you use	<div>2 monitors: main and secondary</div>
Indicate the telephone devices you work with (you can check several devices)	<div><div><input checked="" type="checkbox"/> Landline</div><div><input checked="" type="checkbox"/> Cellular phone-smartphone</div><div><input checked="" type="checkbox"/> None</div></div>
Do you frequently use (more than 2 hours per day or 30 minutes at a time) touch devices (tablet, smartphone)?	<div>No</div>

Readme

Signal

Photo

Video

Report

Ok

Cancel

Figure 5. Assessment questionnaire - LI questionnaire

LII questionnaire

The LII questionnaire (Figure 6) will be defined depending on the answers given in the LI questionnaire. It is divided into the following sections:

- Chair
- Desk
- Screen
- Computer
- Accessories and Communication
- Space
- Environment
- Organization

In each of these sections, the questions can be:

- Drop-down lists to select a single option.
- Open fields in which a numerical data must be written directly.

All the questions must be answered to access the **results**.



Ergo/IBV - Telework

Workstations assessed: Telework section X











Company: ABC Date: 18/11/2021

Observations:

**Assessments**

General data | Li questionnaire | **LII questionnaire** | Results


Chair | Table | Screen | Computer | Accessories and communication | Space | Environment | Organization

Is it possible to adjust the height of the seat while sitting?		No
Does the chair have a base with 5 legs and casters?		No
Is it possible to adjust the inclination of the backrest while sitting?		No
Does the backrest provide support for the lower back?		No
Does the chair have armrests?		Yes, not adjustable in height
In the sitting position, do your feet rest flat on the floor?		No
Are the seat and backrest of the chair padded or made of a breathable material?		No
Does the seat have a properly rounded front edge with no burrs, protrusions or finishes that cause discomfort?		No
Is the seat of the chair a swivel seat?		No
When sitting with your back against the backrest, are there about 5-10 cm between the back of the knee and the seat of the chair?		No

Readme | Signat | Photo | Video | Report | Ok | Cancel

Figure 6. Assessment questionnaire - LII questionnaire


## Help.

In both questionnaires (LI and LII), each question includes a Help button  that explains the criteria that should be considered to collect the requested information correctly.

## Results

Once the LII questionnaire has been completed, the **results** tab (Figure 7) can be accessed, which provides the following information:

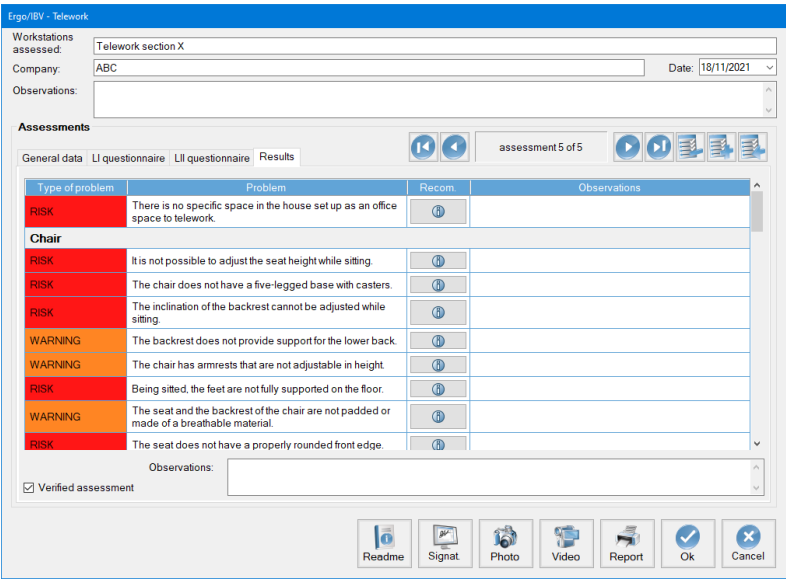
- **Detected problems.** Result of the assessment grouped in sections. The following information is shown for each problem detected:
  - **Type of problem.** Classification of the detected problem:
    - **RISK.** Detected problems that pose an ergonomic risk and need to be solved.
    - **WARNING.** Potential ergonomic problems. It is advisable to check if they pose a problem and intervene if necessary.

- **IMPROVABLE**. Aspects that do not pose an ergonomic risk but can be improved.
- **MISSING DATA**. Aspects that the worker has not been able to answer. A specific detailed study is required to complete the assessment.
  - **Problem**. Description of the problem detected.
- **Recommendations** to help correct the problem that was detected. General recommendations on each problem are provided by pressing the  button
- **Observations**. Open field in which the technician can manually enter the observations he considers relevant about each detected problem.

**Verified assessment.**

If the questionnaire has been completed by the worker, a "Verified assessment" box will appear in the results tab.

This box must be checked once the technician or the prevention service has reviewed and validated the information collected by the worker.



Ergo/IBV - Telework

Workstations assessed: Telework section X










Company: ABC Date: 18/11/2021

Observations:

**Assessments**

General data | LI questionnaire | LI questionnaire | **Results**

assessment 5 of 5

Type of problem	Problem	Recom	Observations
RISK	There is no specific space in the house set up as an office space to telework.		
<b>Chair</b>			
RISK	It is not possible to adjust the seat height while sitting.		
RISK	The chair does not have a five-legged base with casters.		
RISK	The inclination of the backrest cannot be adjusted while sitting.		
WARNING	The backrest does not provide support for the lower back.		
WARNING	The chair has armrests that are not adjustable in height.		
RISK	Being seated, the feet are not fully supported on the floor.		
WARNING	The seat and the backrest of the chair are not padded or made of a breathable material.		
RISK	The seat does not have a properly rounded front edge.		

Observations:

☒ Verified assessment

Readme | Signat. | Photo | Video | Report | Ok | Cancel

Figure 7. Assessment questionnaire – Results

## REPORT AND RECOMMENDATIONS

The *Report* button at the bottom of the main window of this module opens a window that allows the user to configure certain characteristics of the report (Figure 8). Depending on the options chosen, the report will show different information.

Figure 8. Telework – Report

The configuration window of the report includes the following:

- **Type of report.** The user can select an individual report (to obtain the risks and recommendations for a specific workstation) or a collective report that includes several questionnaires of the same case (to obtain statistics on the answers given to the questionnaire of all the selected workstations).


- **Assessments.** It offers a list of the existing questionnaires in the current case (identified by the name or acronym of the worker and by the date of the questionnaire), from which the ones to be included in the report are selected. If the individual report is selected, the program highlights the active questionnaire in the list to facilitate the selection. Pressing the *All* button selects the complete list. To add or delete questionnaires from the selection, keep the <Ctrl> key pressed while clicking on the questionnaires with the mouse.
- **Include recommendations.** Check this box to include in the report recommendations for improvement based on the risks detected. This option is only available for individual reports.

Once the configuration has been decided, pressing the *Accept* button accesses the requested report. The content of both types of report, individual and collective, is detailed separately below.

## REPORT – Individual


An individual report of this module consists of the following parts:

- **Identification.** The identification includes the general data of the analyzed workstation: date of the analysis, job, company, observations of the evaluator, name of the worker, and whether the evaluation has been verified by a technician.
- **Results.** The assessment shows the result with the detected problems grouped in sections. For each problem detected, the type of problem (**risk**, **warning**, **improvable**) and a description of the problem are included.
- **Recommendations.** If this option was selected, it includes, grouped in sections, the recommendations to facilitate the correction of the problems that were detected.



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Telework



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RISK ASSESSMENT REPORT - Individual

IDENTIFICATION

**Date** 11/10/2021


**Workstation** Technician

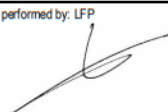
**Company** ABC

**Observations**

**Worker** J.G.C.

**Verified assessment** Yes



Assessment performed by: LFP  


RESULTS

**Chair**

RISK

The work chair is a regular chair, not adjustable

**Table**

WARNING

The depth of the table is less than 80 cm.

**Screen**

IMPROVABLE

The tilt or rotation of the screen cannot be adjusted.

RECOMMENDATIONS

**Chair**


- When a person works in a prolonged sitting position, it is necessary to have a suitable chair that adjusts both to the tasks performed and the worker.
- Regular chairs are not suitable for prolonged working periods as they cannot be adjusted to the task or the person.
- A suitable chair should have adjustment, mobility and comfort options. Most "office" chairs meet these requirements.

Figure 9. Telework - Individual report

## REPORT – Collective


A collective report of this module consists of the following parts (Figure 10):

- **Identification.** It includes the general data of the case: analyzed workstations, company, evaluator observations, and number of assessments analyzed. An image can also be included (which will be the same for the whole case).
- **Analyzed assessments.** It shows a list of the analyzed assessments that have been included in the collective report. The list consists of a table that includes the name of the worker, job, date of the analysis, whether the evaluation has been verified by a technician, and the observations of the evaluator.
- **Results.** It shows the assessment questionnaire with the percentages of responses to each item.



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**RISK ASSESSMENT REPORT - Collective**


**IDENTIFICATION**

**Date** 18/11/2021


**Workstations assessed** Telework section X

**Company** ABC

**Observations**



**No. of analyzed assessments** 5

Assessment performed by: LFP  


**ANALYZED ASSESSMENTS**

Worker	Workstation	Date	Verified	Observations
A.F.R.	Technician	18/11/2021	N/A	
P.R.P.	Administrative	23/11/2021	N/A	
A.L.D.	Administrative	23/11/2021	N/A	
J.G.C.	Technician	11/10/2021	Yes	
M.C.P.	Technician	12/10/2021	Yes	

**RESULTS**

Do you have a specific space in the house set up as an office space to telework?

- Yes	80,00	%
- No	20,00	%

**Chair**

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Indicate the type of chair you use

- Regular chair, not adjustable	40,00	%
- Office chair, adjustable	60,00	%

Is it possible to adjust the height of the seat while sitting?

- Yes	20,00	%
- No	40,00	%
- I don't know	0,00	%

Figure 10. Telework - Collective report