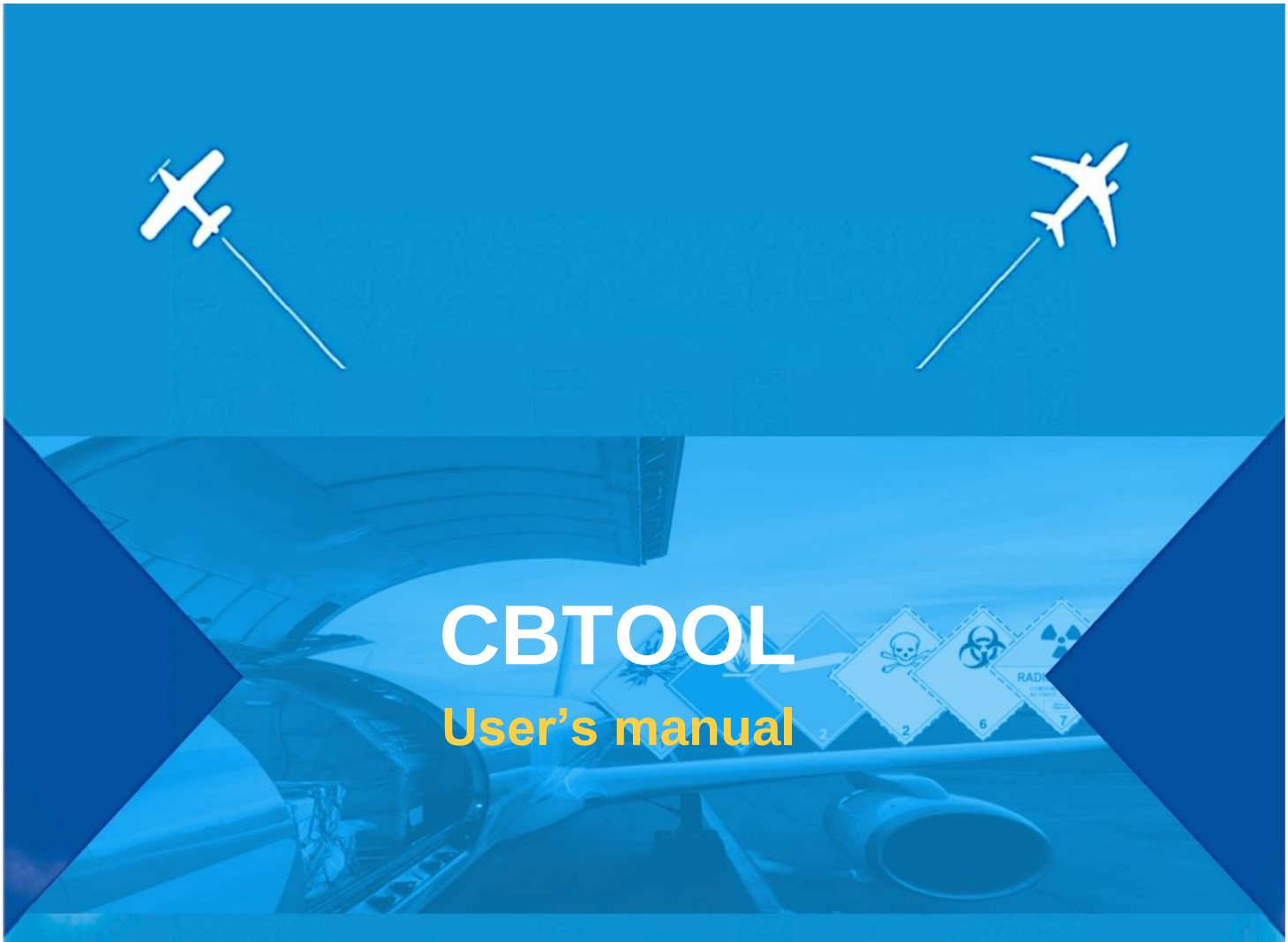
MINISTÈRE
CHARGÉ
DES TRANSPORTS

Liberté
Égalité
Fraternité

dgac direction générale de l'Aviation civile
DSAC



CBTOOL

User's manual

CB TOOL

Competencies Benefiting to Transport persOnnel Oriented tooL

Direction de la sécurité de l'Aviation civile
Direction technique navigabilité et opérations
Édition nº 1
Version nº 1

CBTool user’s manual

Forward

This manual is related to the use of the CBTool application.

As a reminder, the CBTool application can be used as a help for the creation of an assessment plan, and therefore a training plan, within the framework of Competency Based Training (CBT).

It allows you to create/customise libraries of tasks, sub-tasks, knowledge, skills and attitudes. Still by using CBTool, these competencies can be associated with functions (predefined or defined by the user). This tool also allows the definition of minimum expected levels of proficiency and thus lays the foundation for the assessment plan.

The requirements regarding the development of competency-based training programmes can be found in the guide available at the following web address: https://www.ecologie.gouv.fr/guides-exploitants-daeronefs / Guide CBT MD

Table of content

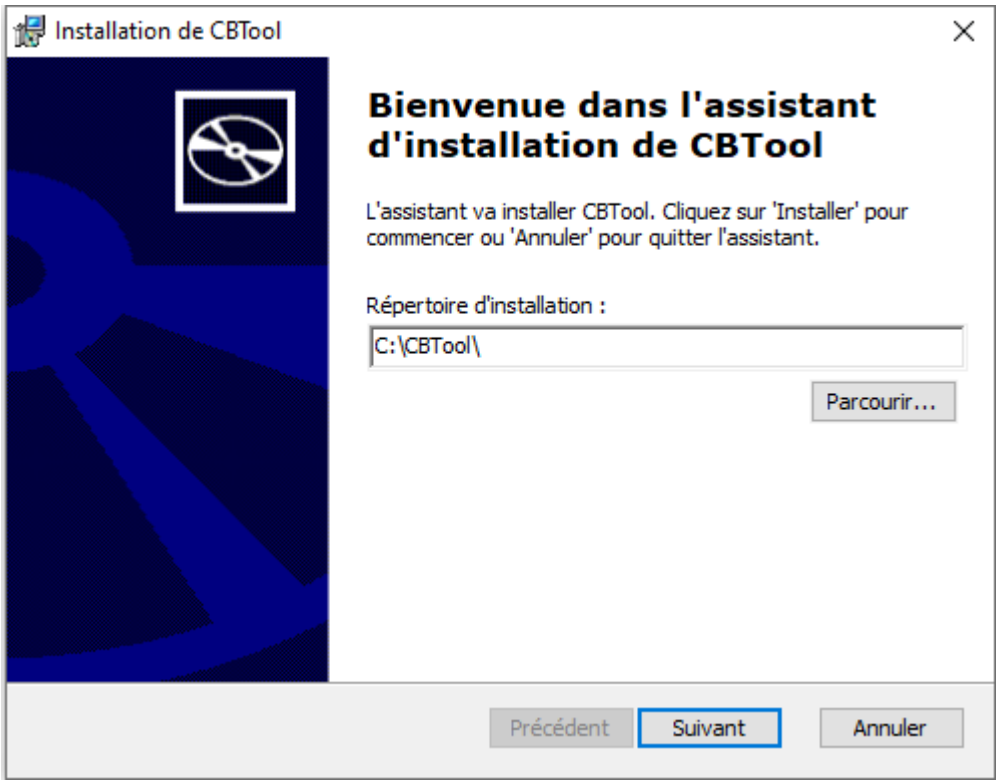
1. Procedure for installing and updating the application 2
1.1. Installing 2
1.2. Updating 5
1.3. Re-installing 5
2. First launch of the application 5
2.1. Language selection 5
3. CBTool presentation 7
3.1. global functioning of CBTool 7
3.2. The taskbar 7
4. References customization 10
4.1. Creating a role 10
4.2. Creating a task 13
4.3. Creating a subtask 13
4.4. Creating a skill 14
4.5. Creating knowledge 14
4.6. Creating a family of attitudes 14
4.7. Creating an attitude 16
4.8. Modifying a reference 16
4.9.Deleting a reference 16
4.10. Modifying a skill status 16
4.11. Modifying the knowledge status 17
5. Steps for generating a matrix (example from A to Z - Simple case of a flight crew) 20
5.1. Subtasks choice 20
5.2. Knowledge choice 21
5.3. Skills choice 22
5.4. Definition of attitudes according to skills 23
5.5. Display of the competencies framework 23
5.6. Return to the home page 29

1. Procedure for installing and updating the application

1.1. Installing

It's better to be administrator to do this procedure.
To install CBTool, double click on the following icon:

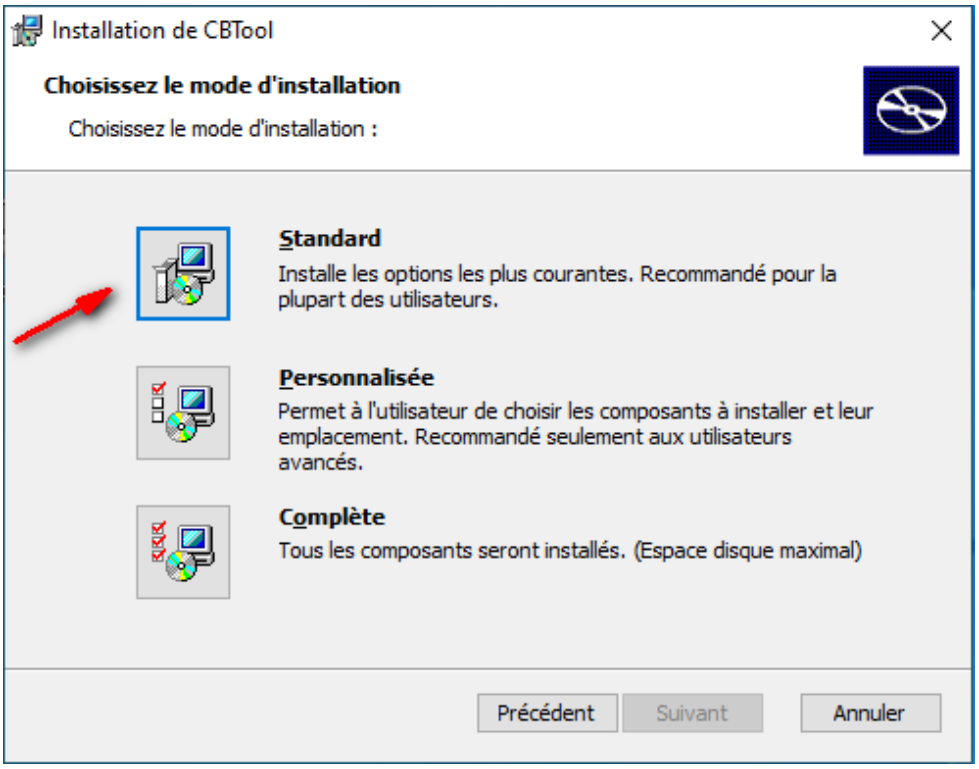
Follow the instructions

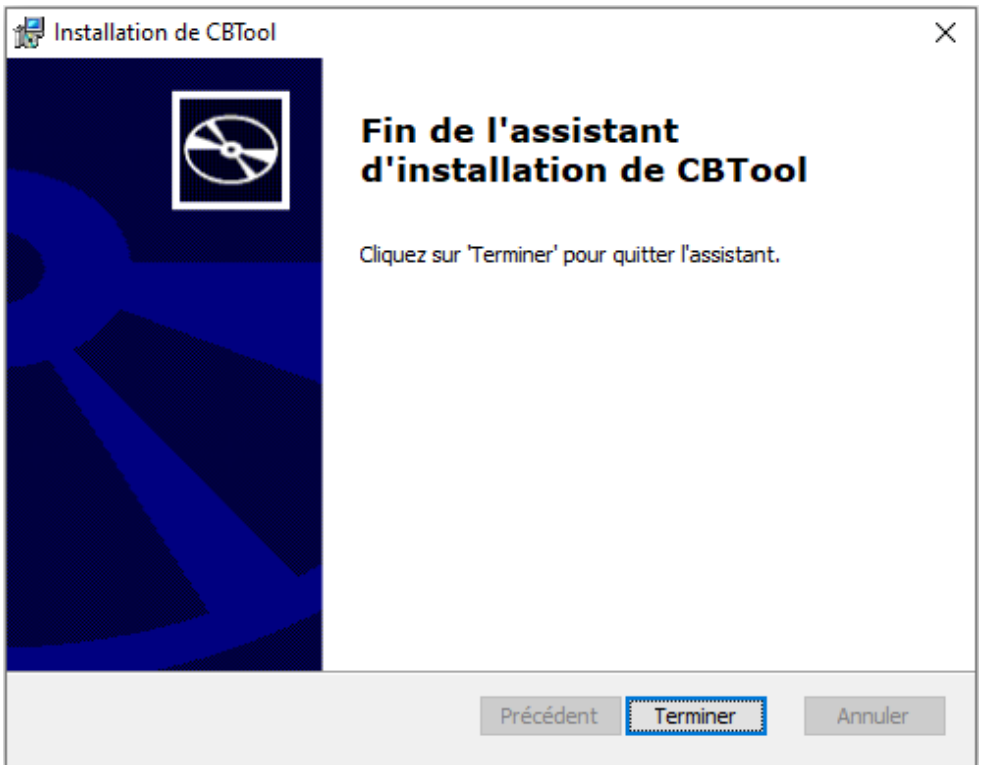


Remark: It is better not to change the proposed install directory.
However, if you wish to do so, it is necessary to install the application at the root of one of your drives (PC or network), eg: "D: \ CBTool \".

Press the button "Suivant".

Choose the Standard install mode as shown below





Press the button "Terminer" to end the install.

The following shortcut is created on the desktop

CBTool

1.2. Updating

The procedure will be defined in a later version of the manual.

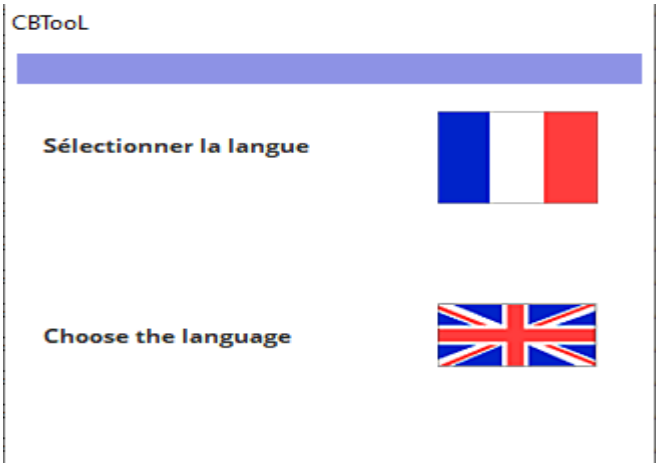
1.3. Re-installing

The procedure will be defined in a later version of the manual.

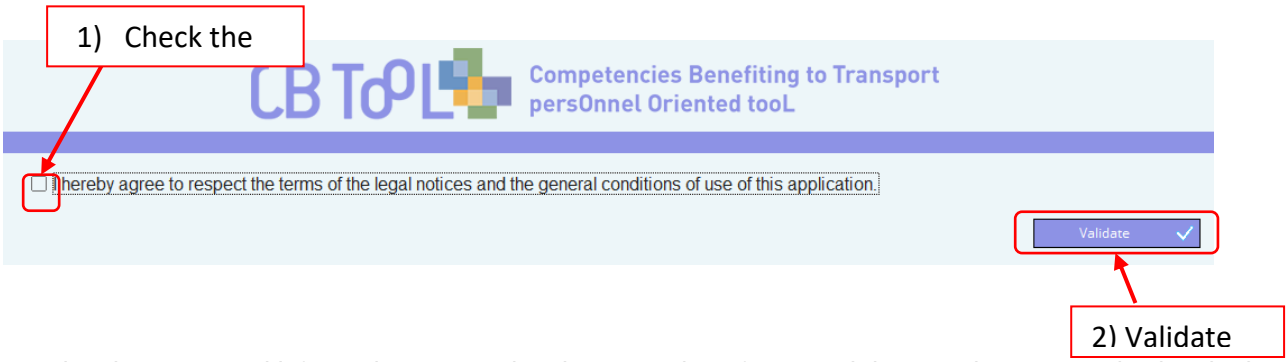
2. First launch of the application

2.1. Language selection

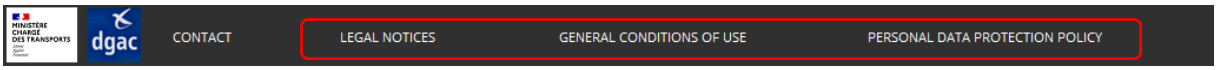
When launching the application for the first time, select the language of use by clicking on one of the two flags. It can be changed later.



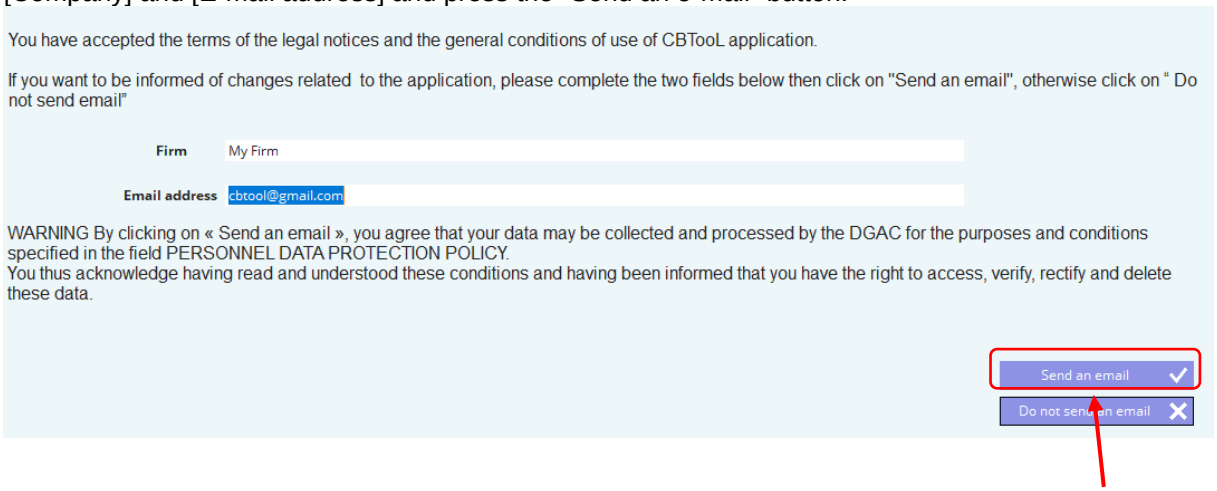
In order to use the application, you must agree to abide by the terms of the Legal Notice and the General Terms of Use (GTU) of the CBTool application.



Legal notice, GTU and information concerning the protection of personal data can be accessed using the banner at the bottom of the page as indicated below:



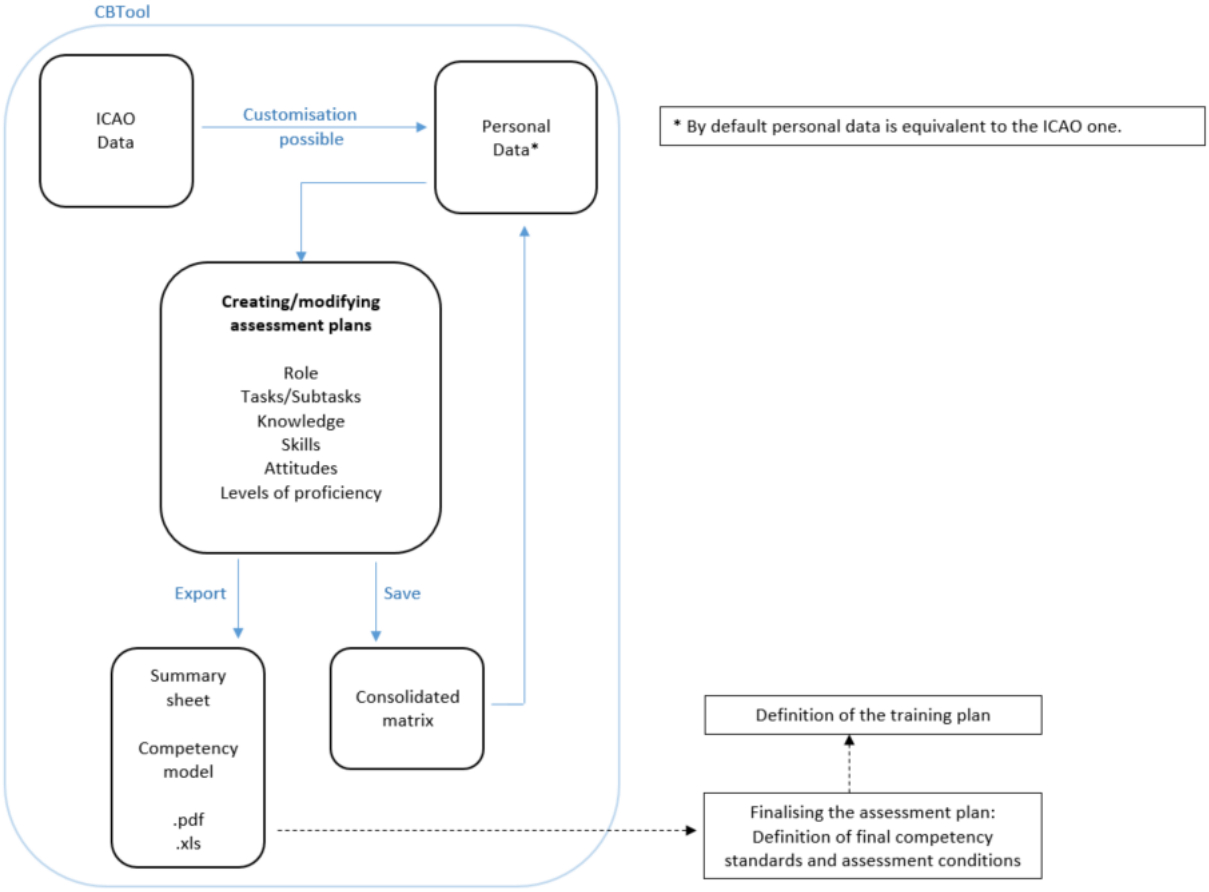
If you wish to receive future information on the evolution of this application, you are invited to fill in the fields [Company] and [E-mail address] and press the "Send an e-mail" button.



Sending the automatic email requires that you first configure your environment by selecting a default email. Otherwise, the message cannot be sent. Nevertheless, it will be possible to send the information [Company] and [E-mail address] to the following address: dsac-contact-cbtmd-bf@aviation-civile.gouv.fr, specifying "Future developments of CBTool" in the subject line.

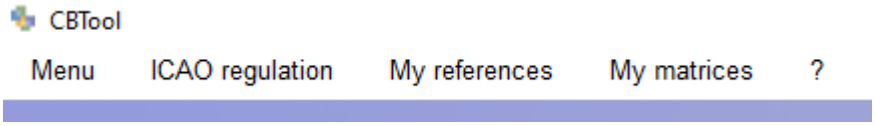
3. CBTool presentation

3.1. global functioning of CBTool



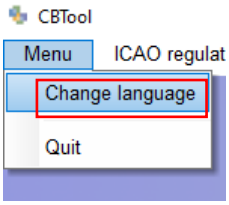
3.2. The taskbar

The taskbar is divided into 5 sub-menu:



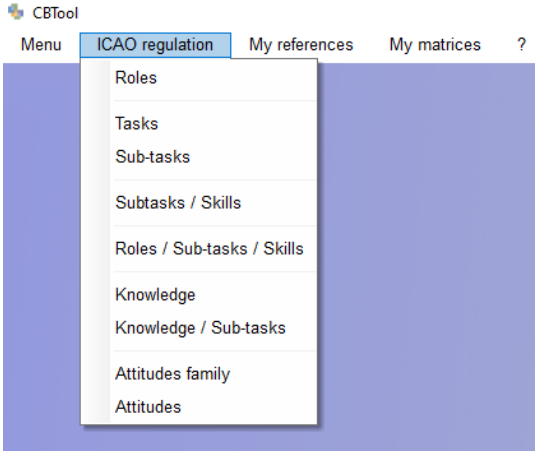
- ***Menu***

The choice of language can also be made from this menu.



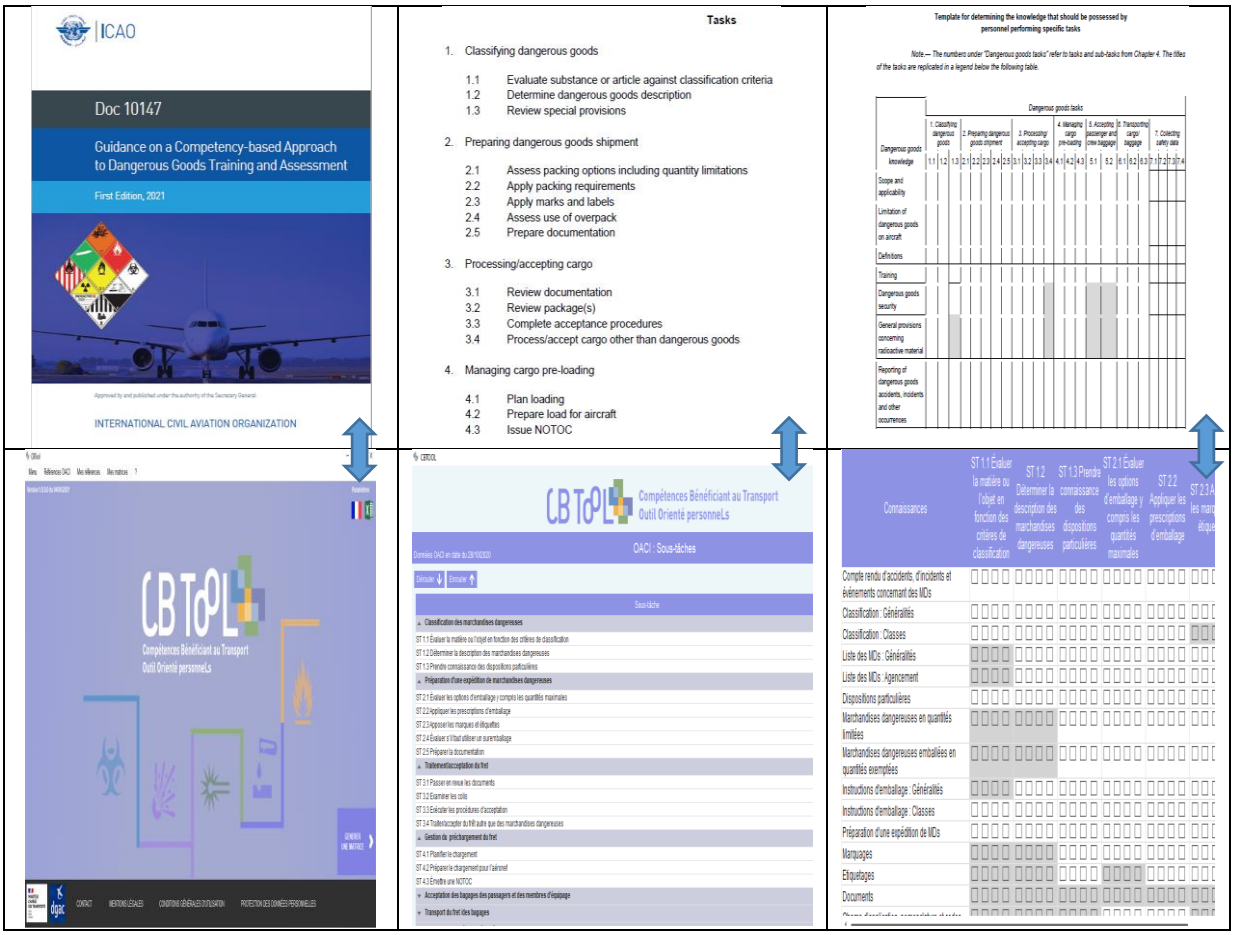
The flag in the top right-hand corner represents the language currently in use:
Here English

- ***ICAO References***

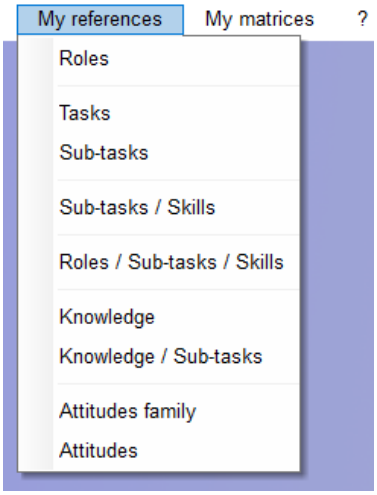


In this part, you have access to all references (roles, tasks, subtasks, knowledge, skills and attitudes) as well as to their interactions as defined by ICAO in the Doc.10147.

This data cannot be modified.



- ***My references***



The application allows you to build your own database, initially based on the ICAO references but according to the specificities of your activities, your organisation and your procedures. This group of data can be modified and deleted unlike the "ICAO references".
As explained in 3.1, the application relies on these "personalized" references for the generation of matrices.

- ***My Matrices***

This sub-menu gives access to all the matrices that have been recorded at the end of the different creation processes. They can be edited, modified, displayed or deleted.

- Add a matrix:

Triggers the process of creating a matrix. Equivalent to pressing the following button:

- Modify a matrix:

From a saved matrix, criteria can be added or deleted. Select the matrix to be modified and press the button "Modify".
The modification of the matrix starts from the selection of the "subtasks".

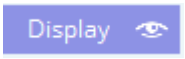
- Rename a matrix:

Allows you to change the French and/or English titles of the matrix. Select the matrix to be renamed and press the button "Rename".

- Delete a matrix:

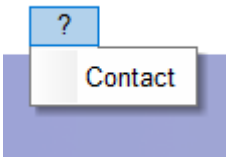
Select the matrix to be deleted and press the button "Delete".

- Display the competency framework:



Allows you to display the competency framework as a whole. It can be exported in .pdf or .xls format. To do so, select the matrix corresponding to the competency framework you want to display and press the button.

- ***« ? »***



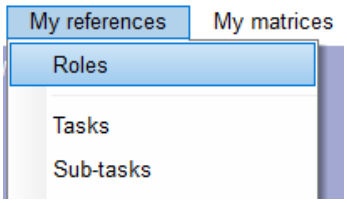
The "Contact" sub-menu allows you to generate an email to the team in charge of CBT and CBTool. You can, for instance, request assistance in the event of a problem related to the use of the application or if a malfunction is detected.

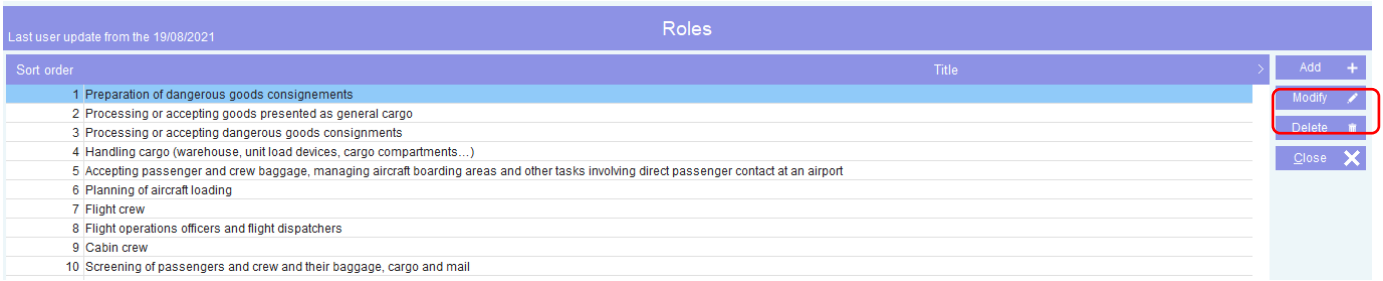
4. Reference customization

The creation of a task, a subtask or knowledge follows the same logic.

4.1. Creating a role

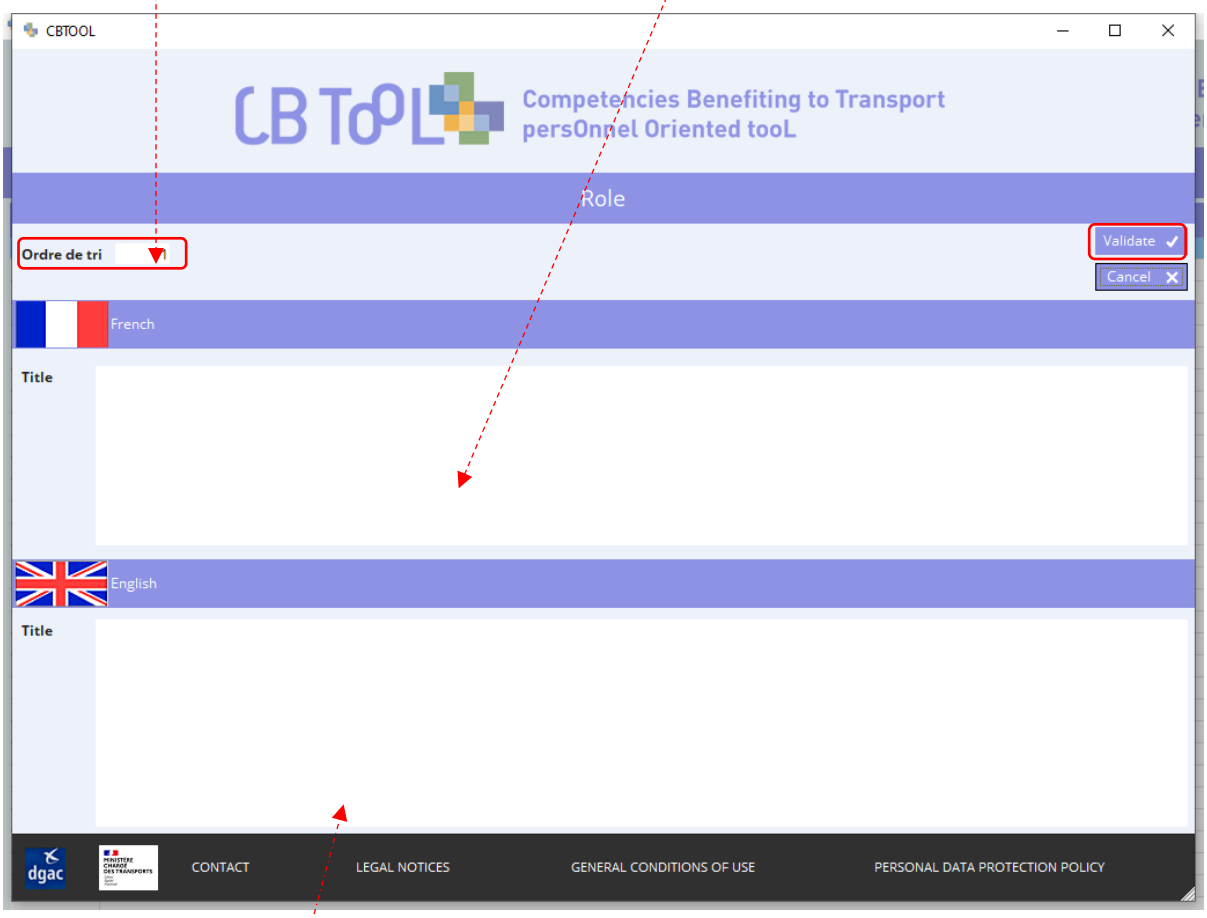
In the "My References" menu, select "Roles"





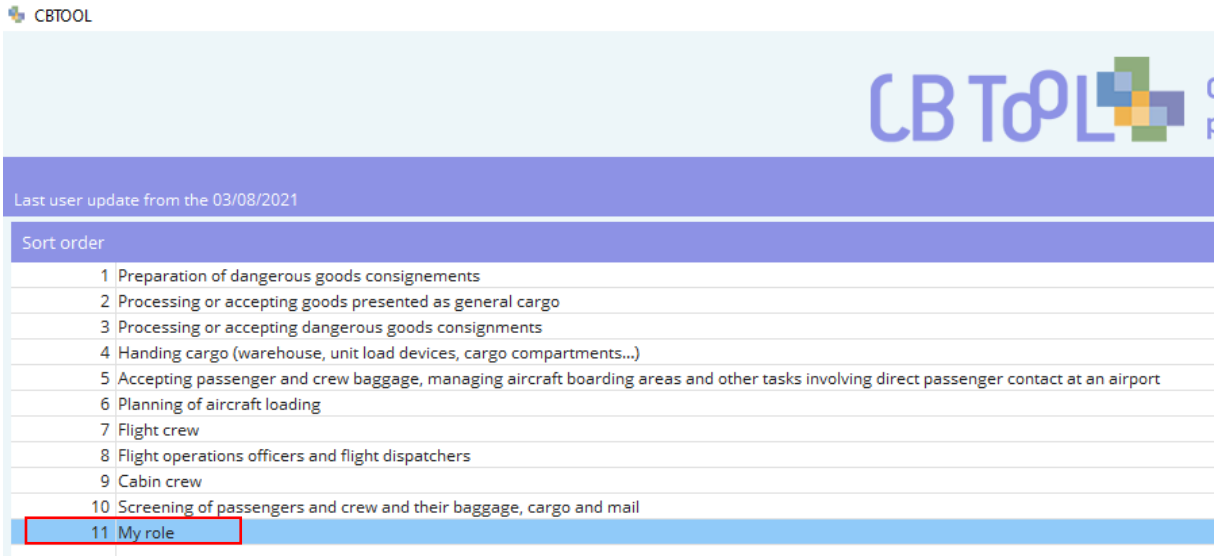
Press the « Add » button

Enter the name of the new role to be created in the "Label" fields and validate.
The "Sort order" field can be modified to change the display of the roles. By default, it is set to the hightest number already used + 1. As a consequence and by default, this new role while be listed as the last one.



Note: If the English "label" field is blank when validating, it will automatically be filled in like the French one.

Once created, the new role appears in the list of roles:

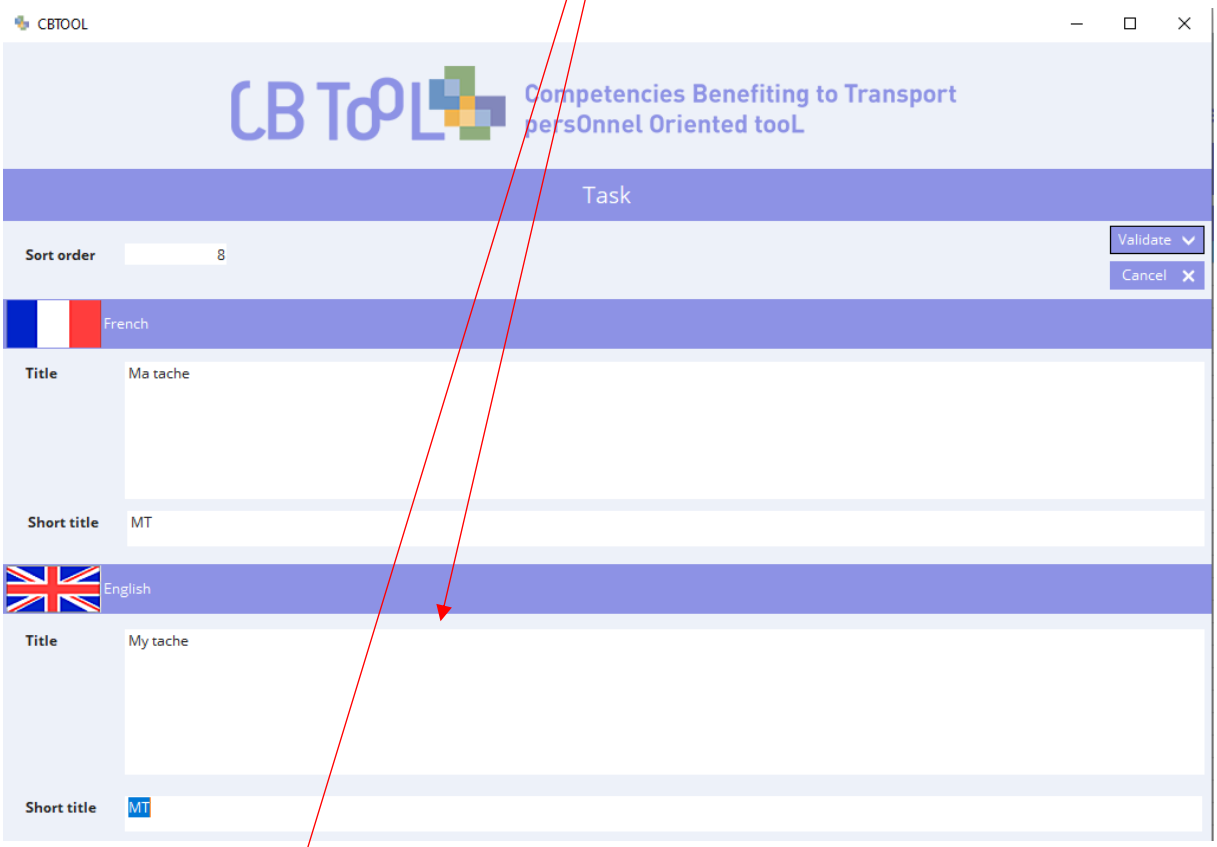

CBTOOL
Last user update from the 03/08/2021
Sort order
1 Preparation of dangerous goods consignements
2 Processing or accepting goods presented as general cargo
3 Processing or accepting dangerous goods consignments
4 Handing cargo (warehouse, unit load devices, cargo compartments...)
5 Accepting passenger and crew baggage, managing aircraft boarding areas and other tasks involving direct passenger contact at an airport
6 Planning of aircraft loading
7 Flight crew
8 Flight operations officers and flight dispatchers
9 Cabin crew
10 Screening of passengers and crew and their baggage, cargo and mail
11 My role

4.2. Creating a task

Same logic as for the role. However, the" short label" field should be filled in both in French and English.

If the English "label" and "short label" fields are blank when validating, they will automatically be filled in like the French ones.

The "label" is a literal description of the created field whereas the "short label" is the reference to it and will be used in the creation/modification processes.



4.3. Creating a subtask

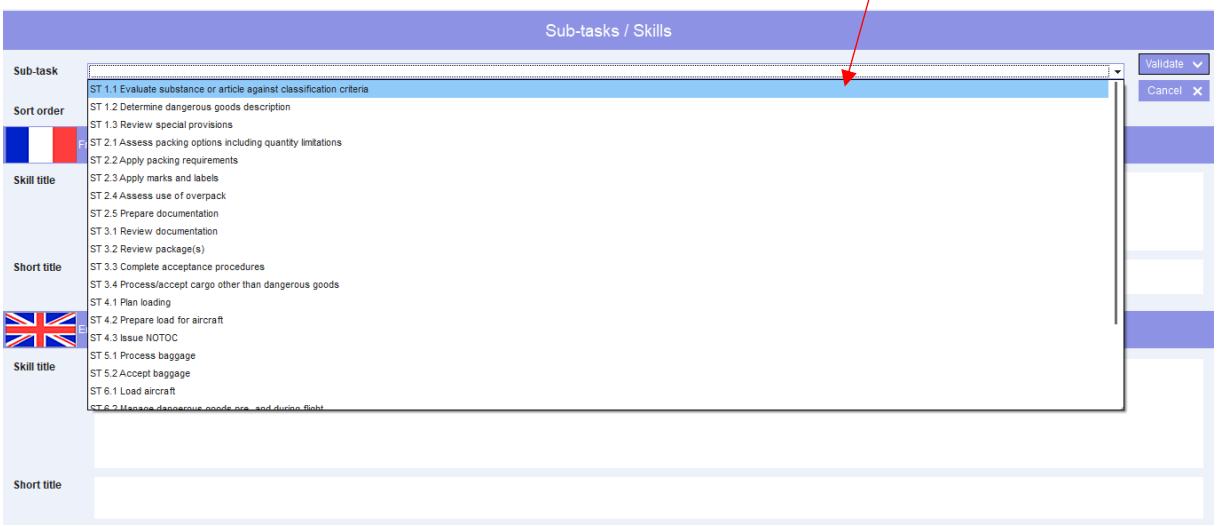
First, from the drop-down menu, select the task to which the subtask will be associated then apply the same procedure than previously shown.

Note : The new sub-task will be accessible when creating a matrix if you associate one or more activities with it (see 4.4)

4.4. Creating a skill

Select first on the sub-menu « Subtasks / Skills »

As above, from the drop-down menu, select first of all the subtask to which the skill will be associated then apply the same procedure than previously shown.



4.5. Creating knowledge

Same logic as for the creation of a role.

4.6. Creating a family of attitudes

To assist operators in defining attitudes, ICAO has defined five broad families of competencies:

- Application of procedures and compliance with regulations
- Communication
- Leadership, teamwork and self-management

- Problem-solving and decision-making
- Workload management

Each of these is associated with a list of observable behaviours (attitudes), e.g.

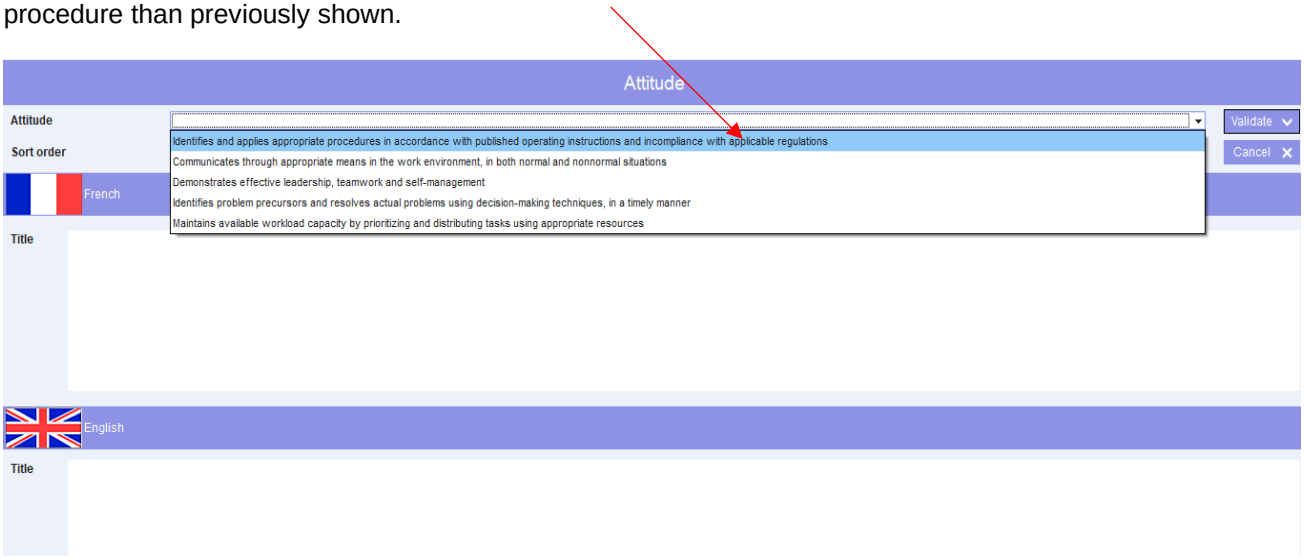
Application of procedures and compliance with regulations
- Identifies where to find procedures and regulation
- Follows relevant procedures in a timely manner
- Complies with applicable regulations
- Applies relevant procedural knowledge

All this information is developed in the CBT guide.

Same logic as for the creation of a role.

4.7. Creating an attitude

From the drop-down menu, select the family to which the attitude will be associated then apply the same procedure than previously shown.



4.8. Modifying a reference

The following procedure applies to roles, tasks, subtasks, knowledge, skills and attitudes.

As explained above, only the data in "My references" can be modified.
In general, in the submenu “My references” select the type of competency, select the one to be modified and press the button "Modify".

Note: modifying a reference already used in one or more saved matrices will automatically update the concerned matrices.

4.9. Deleting a reference

The following procedure applies to roles, tasks, subtasks, knowledge, skills and attitudes.

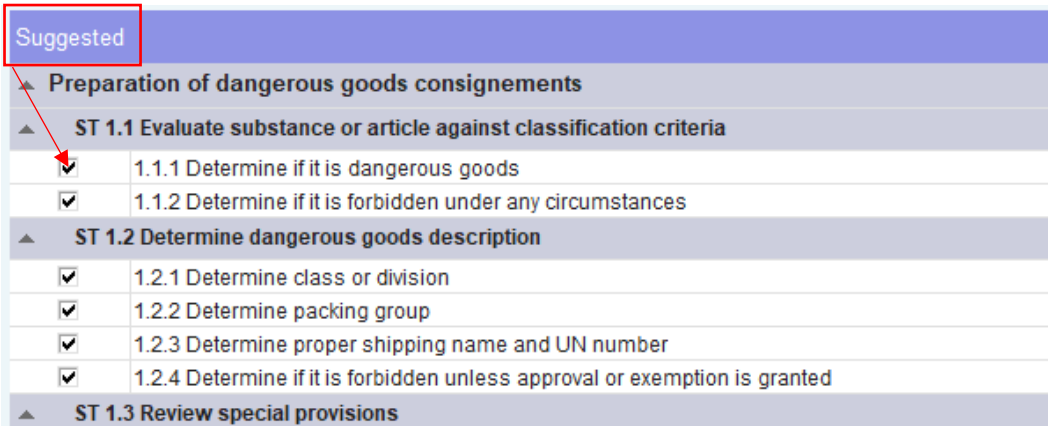
As explained above, only the data in "My references" can be deleted.
In general, in the submenu “My references” select the type of competency, select the one to be deleted and press the button "Delete".

Note: deleting a reference already used in one or more saved matrices will automatically update the concerned matrices.

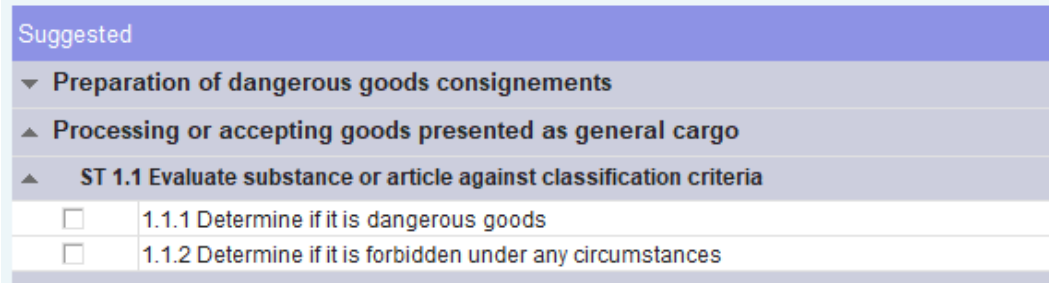
4.10. Modifying a skill status

As indicated in the CBT guidance annex 2, ICAO has define skills considered as « recommended » regarding the tasks and the sub-tasks choosen.

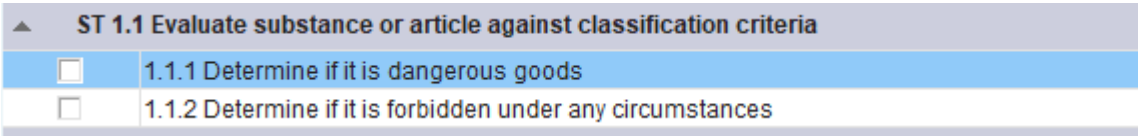
Thus, in the CBTool application, these skills are selected by default as « suggested » and are displayed as shown below.



If the skill status is not “Suggested” it will appears as shown

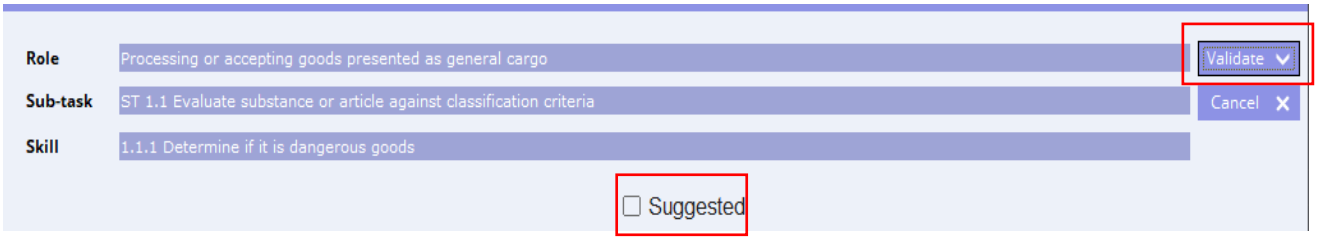


To change this status, select « Role/sub-tasks/skill » sub-menu.
Then select the role and the sub-task concerned in order to access the skill to modify.



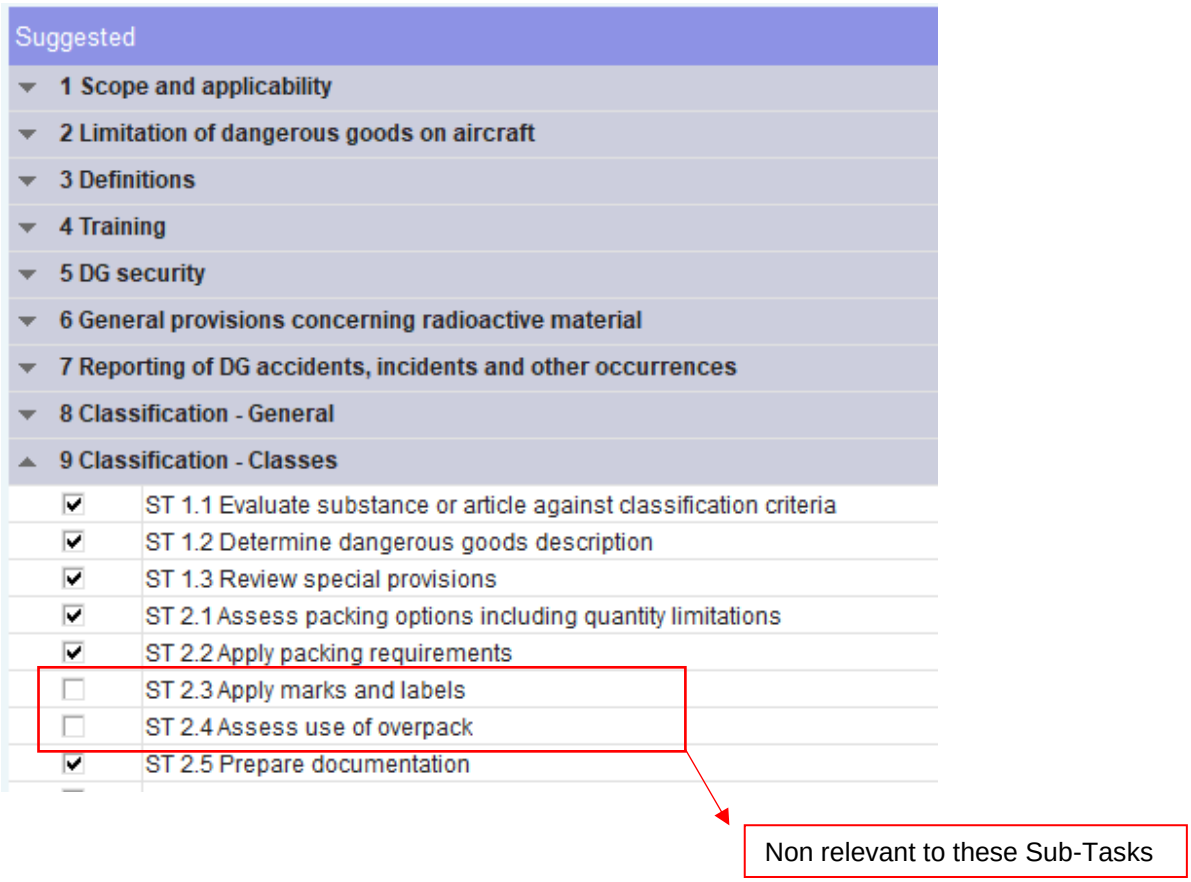
Press the « Modify» button.

Check the « Suggested » box to change the status and validate.



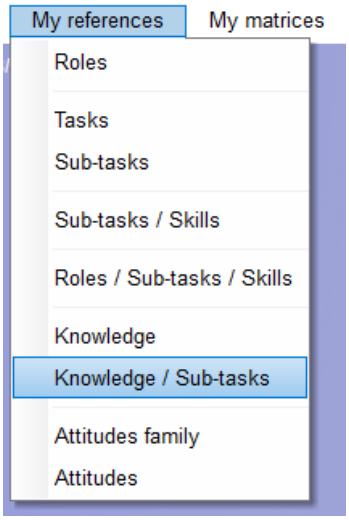
4.11. Modifying the knowledge status

ICAO considered some knowledge as non-essential for some sub-tasks (CBT guidance annex 3). Thus, in the CBTool application, this is materialized by an unchecked « Suggested » box as indicated below.

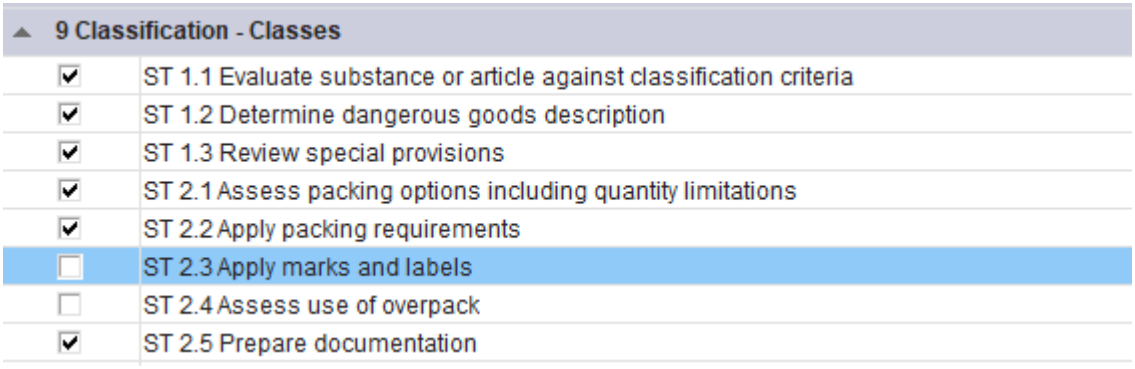


In this example, the knowledge « Classification : classes » is considered by ICAO as being non relevant to the sub-tasks « ST 2.3 et ST 2.4 ». It appears « Shaded/Blocked » when generating a matrix and shall be activated to be selectable.

To consider this knowledge as always selectable for the above-mentioned sub-tasks, select the "Knowledge / Sub-task" sub-menu.

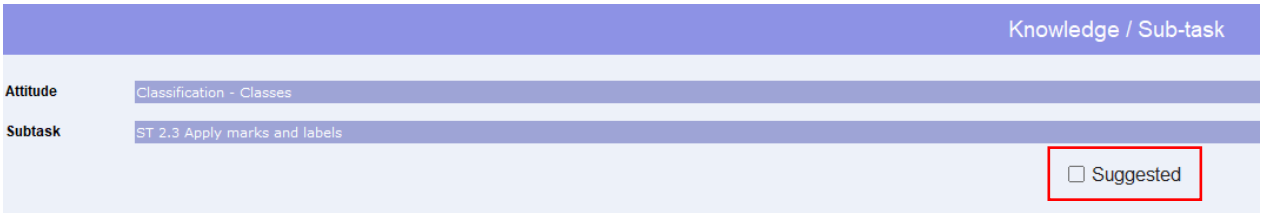


Display the concerned knowledge, then select the sub-task to be modified:



Press the « Modify » button.

Check the « Suggested » box to change the status and validate.

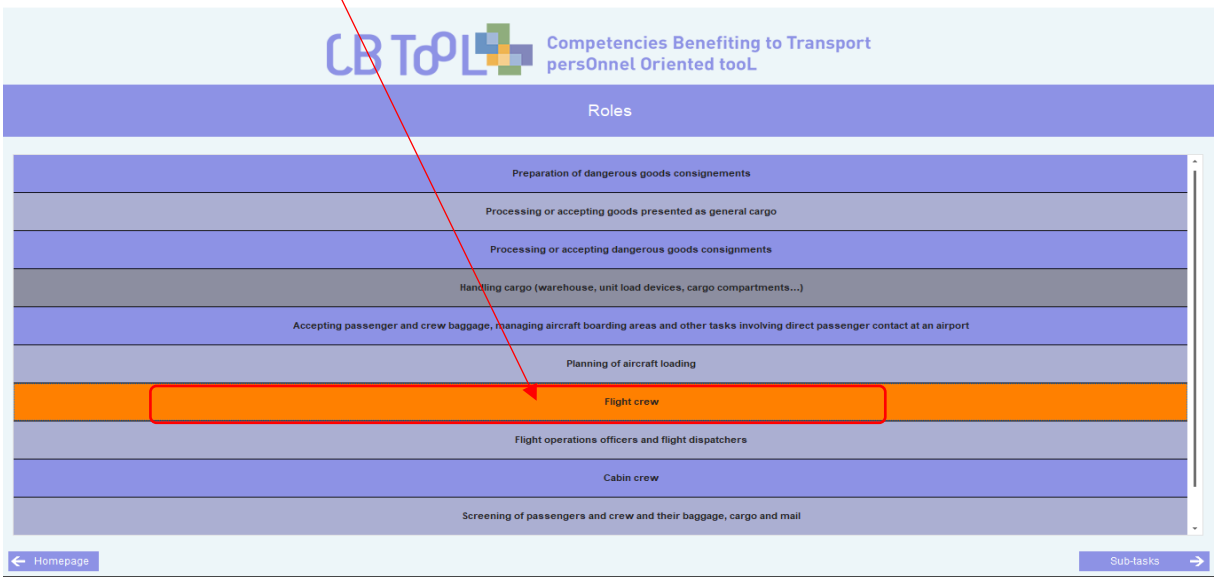


Repeat this action for each sub-task concerned in a knowledge.

5. Steps for generating a matrix (example from A to Z - Simple case of a flight crew)

Note: this case study is only intended to illustrate the use of the application. It is not intended as a reference for the creation of a training plan. Each user will have to build his own plan according to his activity, organisation and procedures.

Select the role « Flight crew »



Continue by pressing the "Subtasks" button to access the subtasks choice page

5.1. Subtasks choice

Pre-ticked boxes

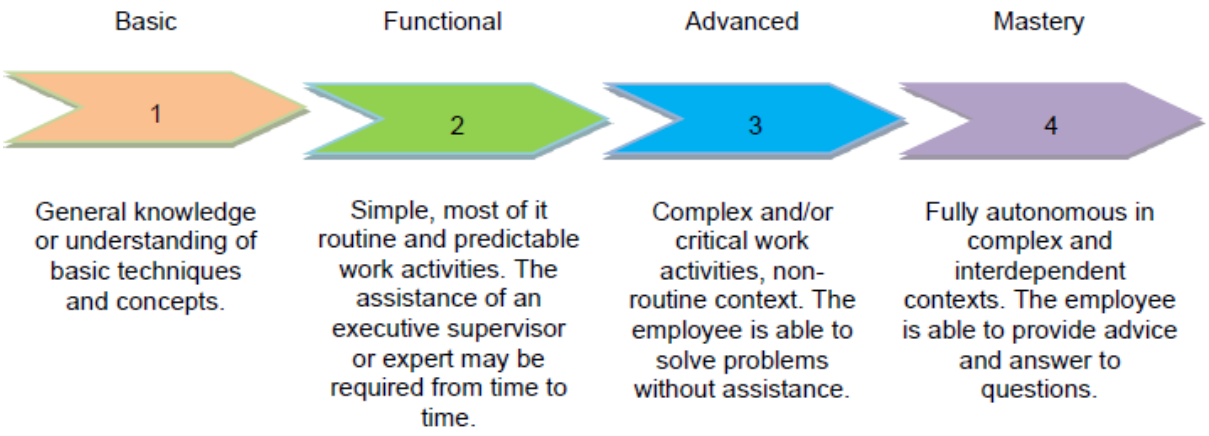
Some sub-tasks are pre-ticked: if no change have been made, they correspond to those initially defined by ICAO. Otherwise, they are those defined by the user in « My reference» sub-menu.
It is possible to select others according to the specifics of the role concerned.

Continue by pressing the « Knowledge» button.

5.2. Knowledge choice

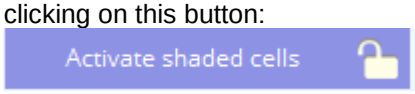
It is a matter of choosing the levels of knowledge needed for the selected subtasks.

To select the level, check the boxes according to the following scale:

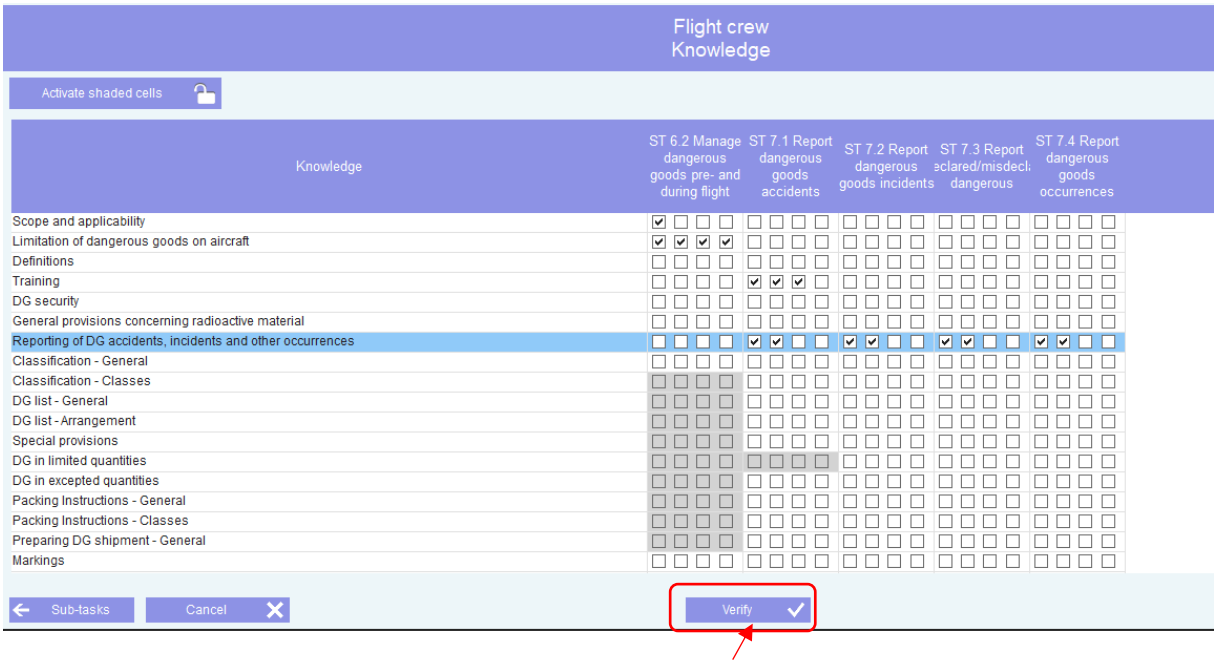


To cancel a selection, deselect the first box.

The shaded boxes are items considered as non-relevant by ICAO. They are locked by default, but can be activated by clicking on this button:

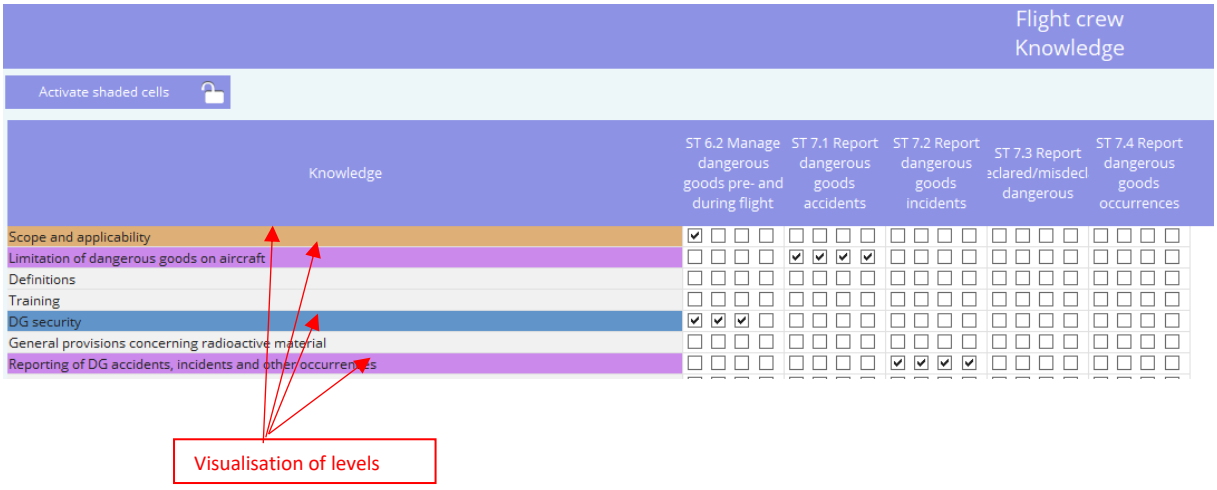


For a same knowledge, the highest level selected will be retained as being the reference level.

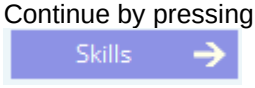


Visual check of levels

Once the boxes have been ticked, it is possible to check whether the knowledge levels are consistent by clicking on the "Check" button.
The colours related to the defined levels will be displayed on the knowledge name.



Continue by pressing the "Skills" button

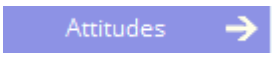


5.3. Skills choice

For each selected subtask, the associated skills are by default pre-selected.

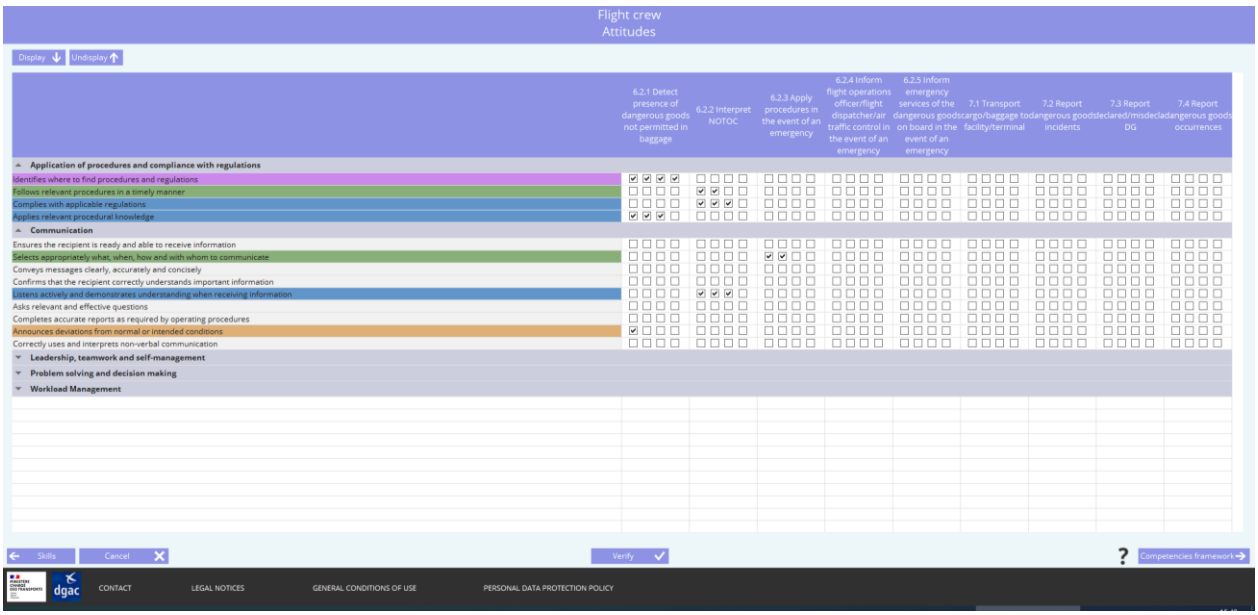
They can either be deselected or new ones selected.

Continue by pressing the "Attitudes" button



5.4. Definition of attitudes according to skills

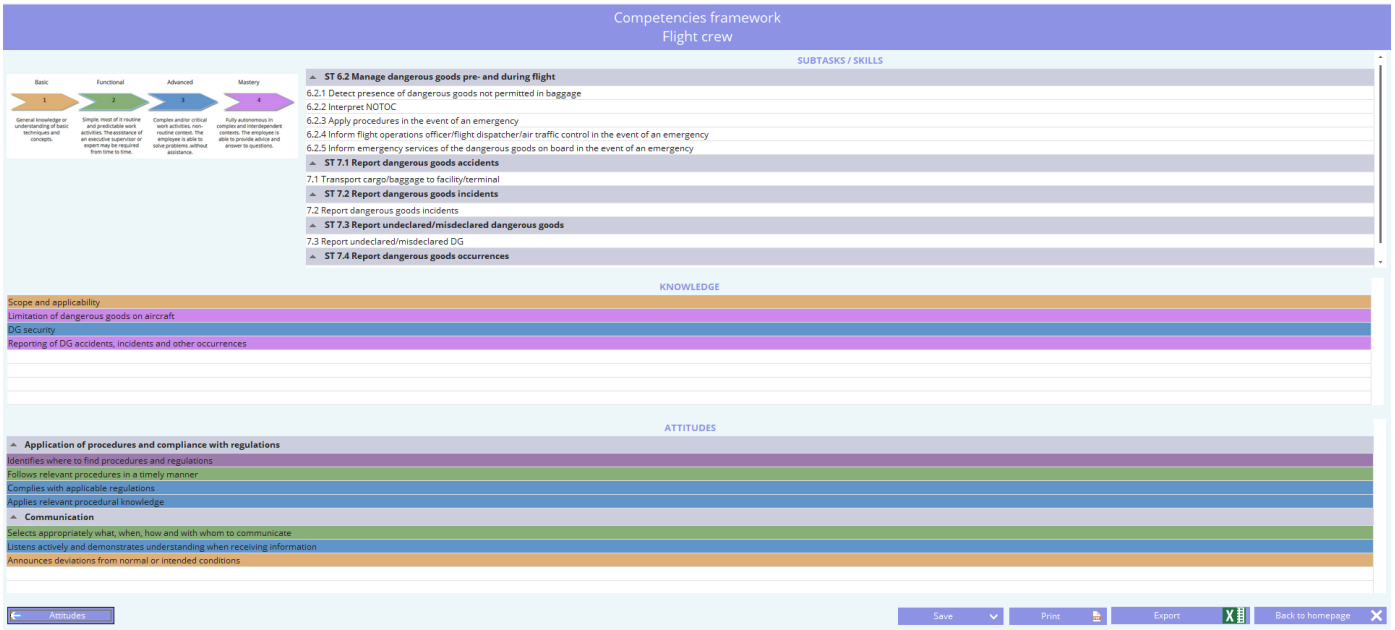
Here, the purpose is to determine the level required for each attitude according to the related skills.
The principle of level selection shown previously applies here as well.



When the selection is finished, continue by pressing the "Competence framework" button

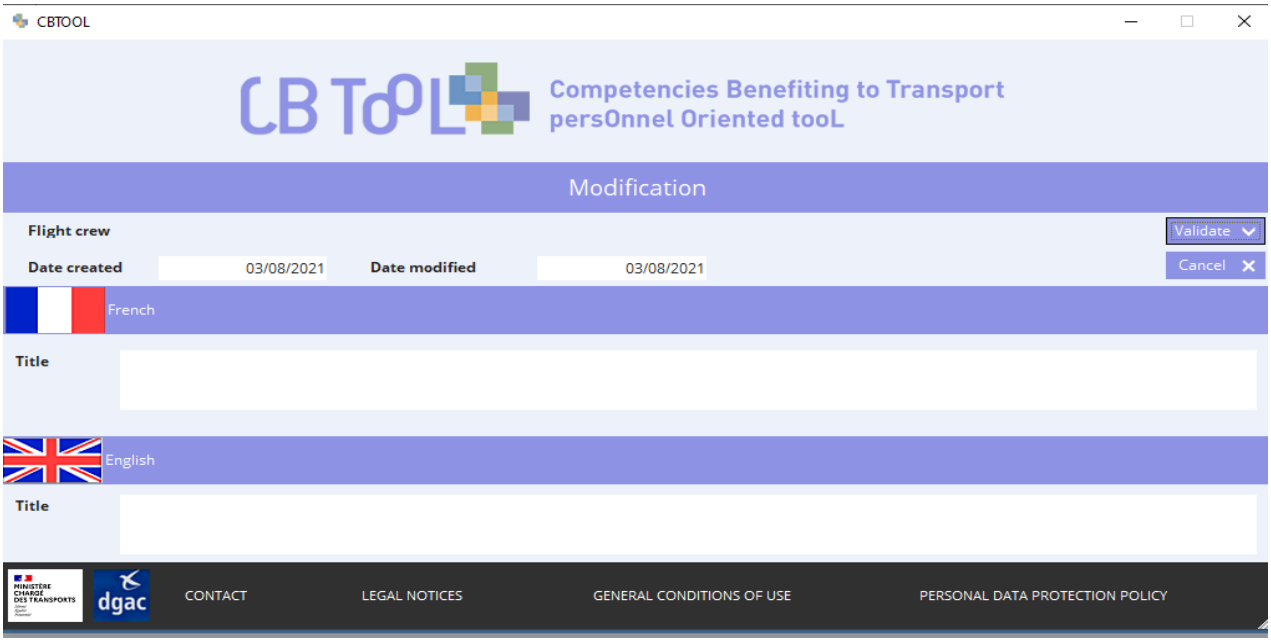
5.5. Display of the competencies framework

CBTool offers you a consolidated version of the competence framework:



Several options are then available:

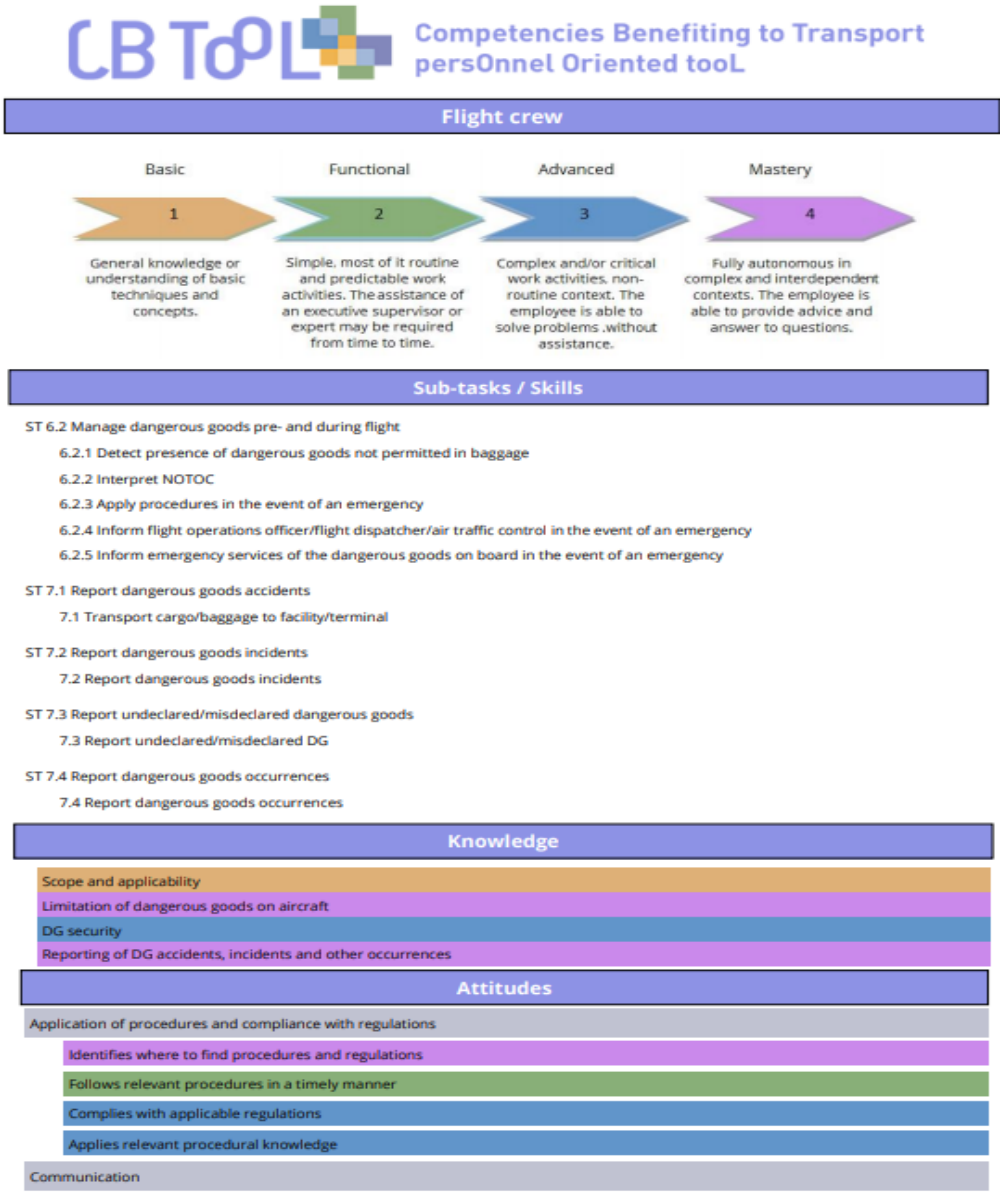
5.5.1 Saving the matrix



Fill in the "labels" fields in French and English and validate
The matrix will be saved in the application unlike .xls or .pdf exports which can be saved in a directory of your choice. (see 5.5.3)

5.5.2 Printing/saving the competency framework

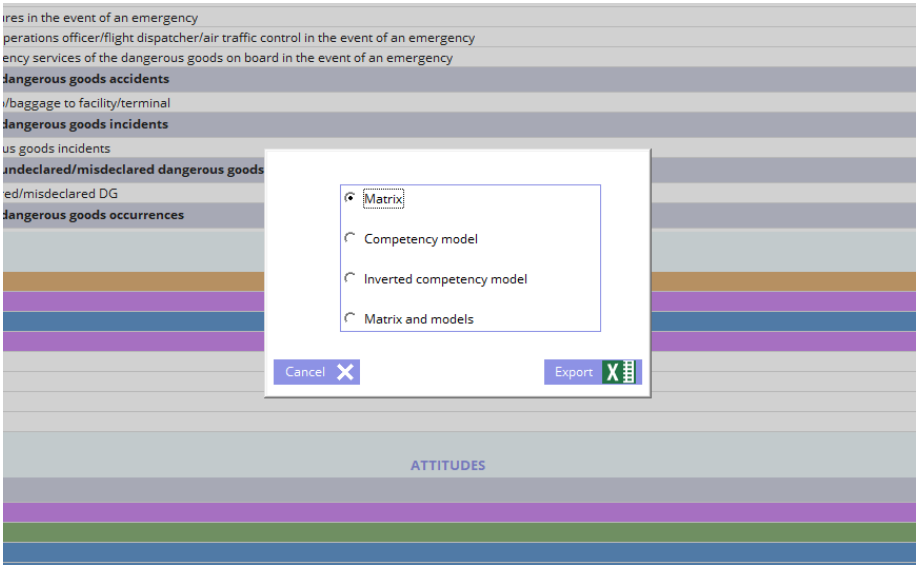
Printing provides a PDF version of the competency framework:



It is then possible to print it and / or save it on your computer or network.

Note: It is recommended to save your files in a different directory from the application installation directory in order to avoid their deletion during a possible uninstallation.

5.5.3 Exporting to .xls format

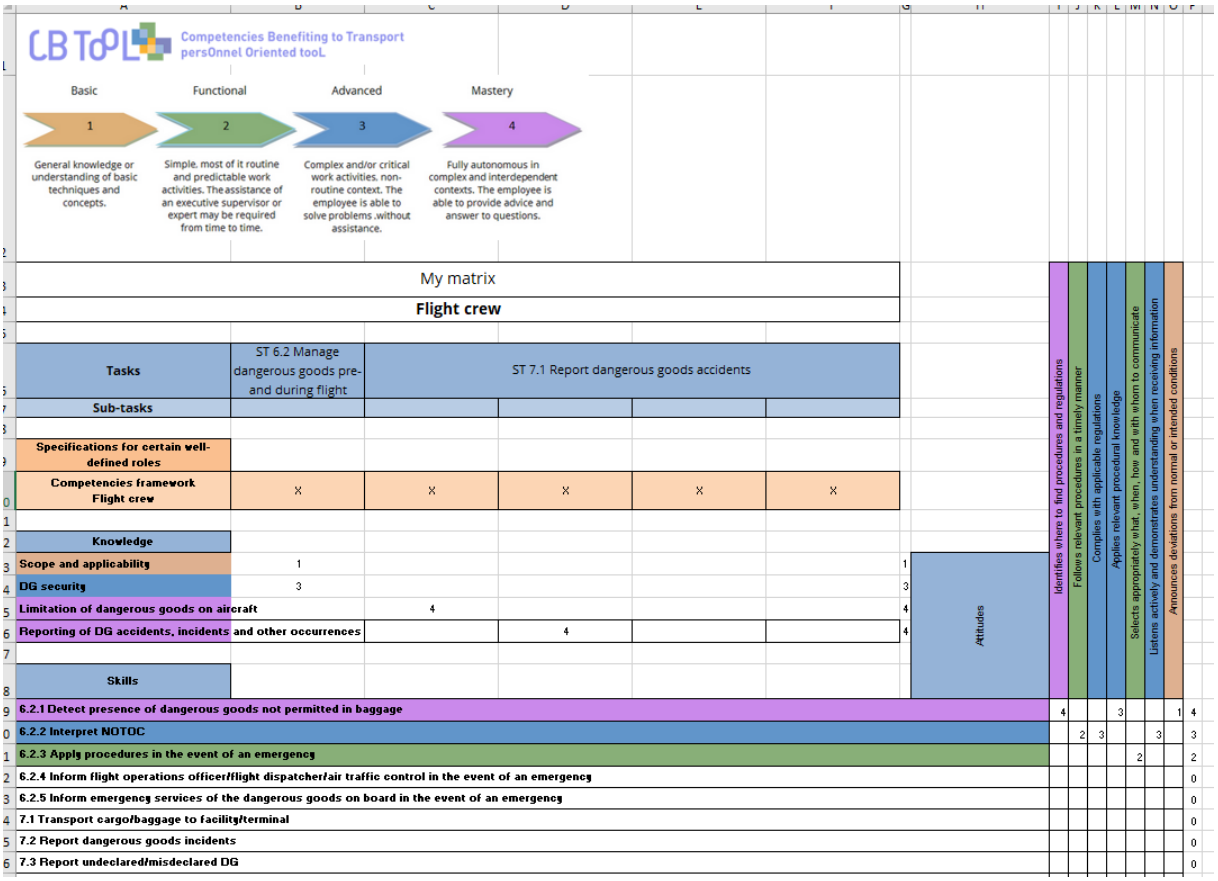


CBTool allows to generate XLS files. It will be then possible to print and/or save them on your computer or network.

Note: It is recommended to save your files in a different directory from the application installation directory in order to avoid their deletion during a possible uninstallation.

4 choices are possible :

- Exporting the matrix to Excel



CB TOOL Competencies Benefiting to Transport persOnnel Oriented tooL

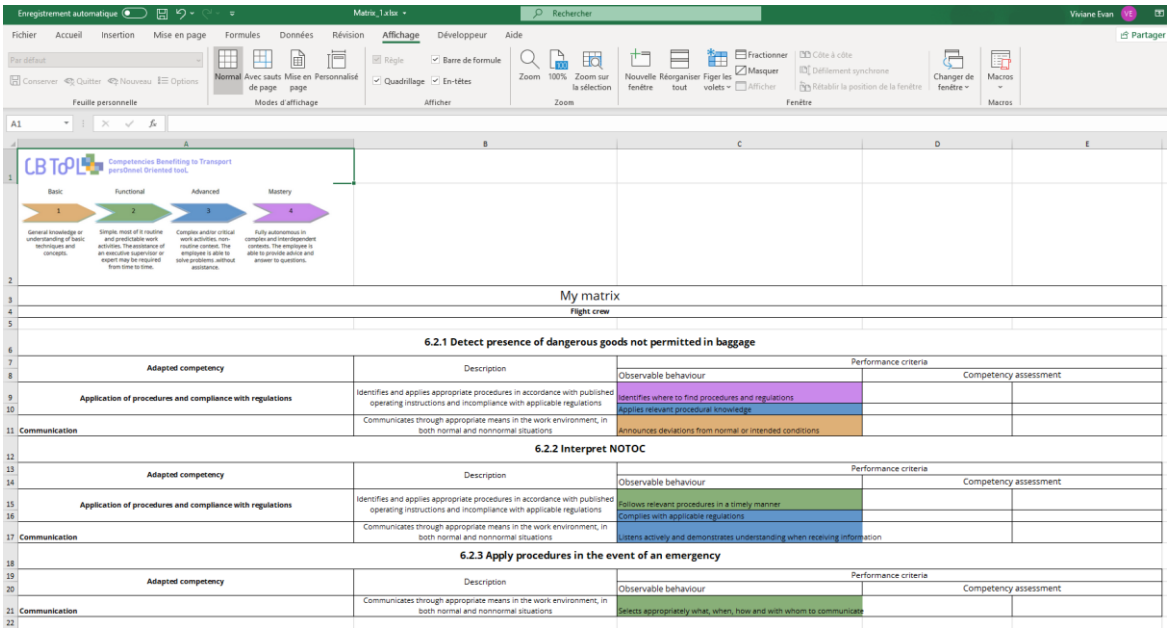
Basic	Functional	Advanced	Mastery
1	2	3	4
General knowledge or understanding of basic techniques and concepts.	Simple, most of it routine and predictable work activities. The assistance of an executive supervisor or expert may be required from time to time.	Complex and/or critical work activities, non-routine context. The employee is able to solve problems ,without assistance.	Fully autonomous in complex and interdependent contexts. The employee is able to provide advice and answer to questions.

My matrix

Flight crew

Tasks	ST 6.2 Manage dangerous goods pre- and during flight	ST 7.1 Report dangerous goods accidents				Attitudes	Identifies where to find procedures and regulations	Follows relevant procedures in a timely manner	Complies with applicable regulations	Applies relevant procedural knowledge	Selects appropriately what, when, how and with whom to communicate	Listens actively and demonstrates understanding when receiving information	Announces deviations from normal or intended conditions	
Sub-tasks														
Specifications for certain well-defined roles														
Competencies framework Flight crew	X	X	X	X	X									
Knowledge														
Scope and applicability	1					1								
DG security	3					3								
Limitation of dangerous goods on aircraft		4				4								
Reporting of DG accidents, incidents and other occurrences			4			4								
Skills														
6.2.1 Detect presence of dangerous goods not permitted in baggage							4			3			1	4
6.2.2 Interpret NOTOC								2	3			3		3
6.2.3 Apply procedures in the event of an emergency											2			2
6.2.4 Inform flight operations officer/flight dispatcher/air traffic control in the event of an emergency														0
6.2.5 Inform emergency services of the dangerous goods on board in the event of an emergency														0
7.1 Transport cargo/baggage to facility/terminal														0
7.2 Report dangerous goods incidents														0
7.3 Report undeclared/misdeclared DG														0

- Exporting the competency model to Excel



My matrix

Flight crew

6.2.1 Detect presence of dangerous goods not permitted in baggage

Adapted competency	Description	Performance criteria: Observable behaviour	Competency assessment	
Application of procedures and compliance with regulations	Identifies and applies appropriate procedures in accordance with published operating instructions and incompliance with applicable regulations	Identifies where to find procedures and regulations		
		Applies relevant procedural knowledge		
Communication	Communicates through appropriate means in the work environment, in both normal and nonnormal situations	Announces deviations from normal or intended conditions		

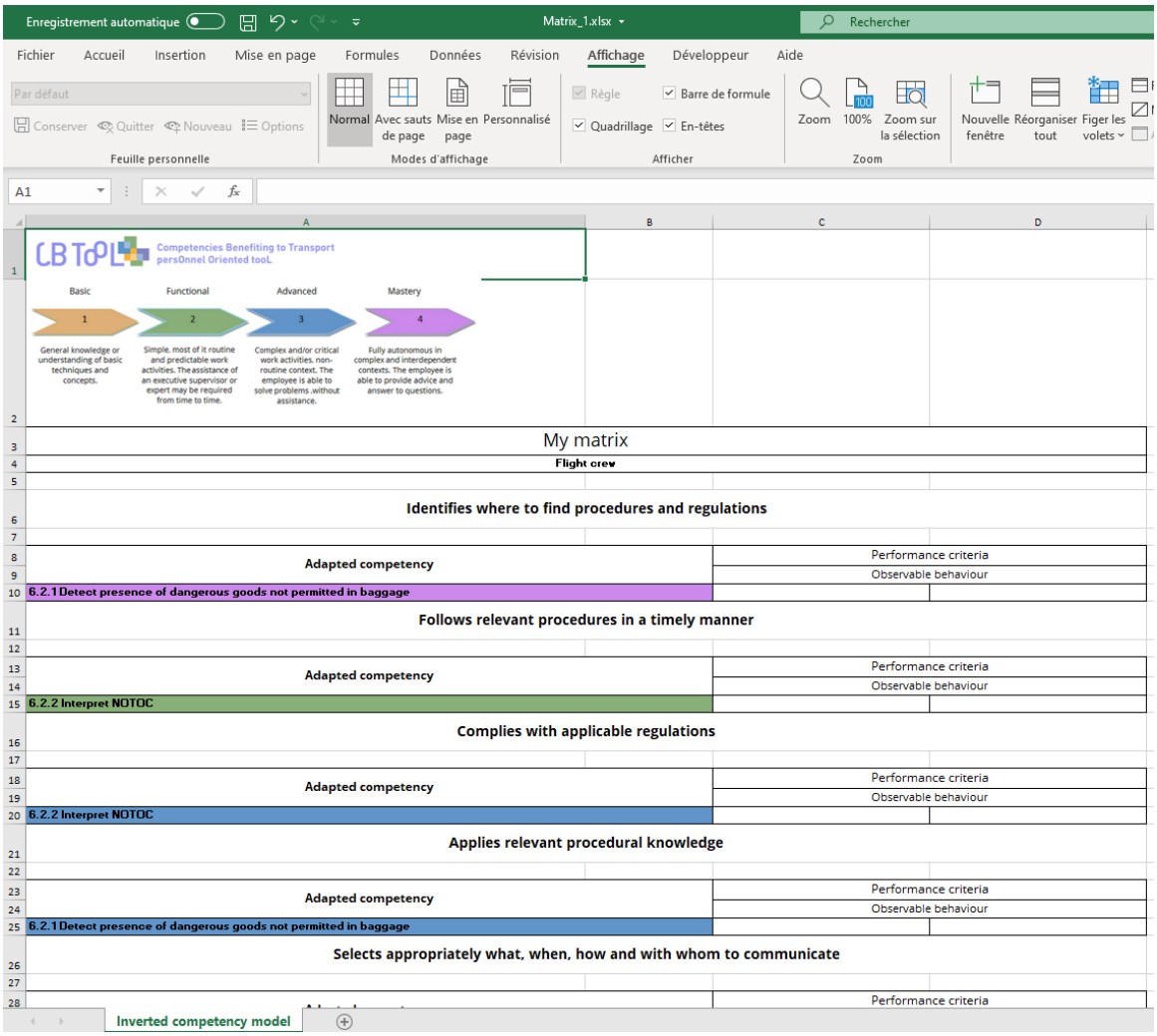
6.2.2 Interpret NOTOC

Adapted competency	Description	Performance criteria: Observable behaviour	Competency assessment	
Application of procedures and compliance with regulations	Identifies and applies appropriate procedures in accordance with published operating instructions and incompliance with applicable regulations	Follows relevant procedures in a timely manner		
		Complies with applicable regulations		
Communication	Communicates through appropriate means in the work environment, in both normal and nonnormal situations	Listens actively and demonstrates understanding when receiving information		

6.2.3 Apply procedures in the event of an emergency

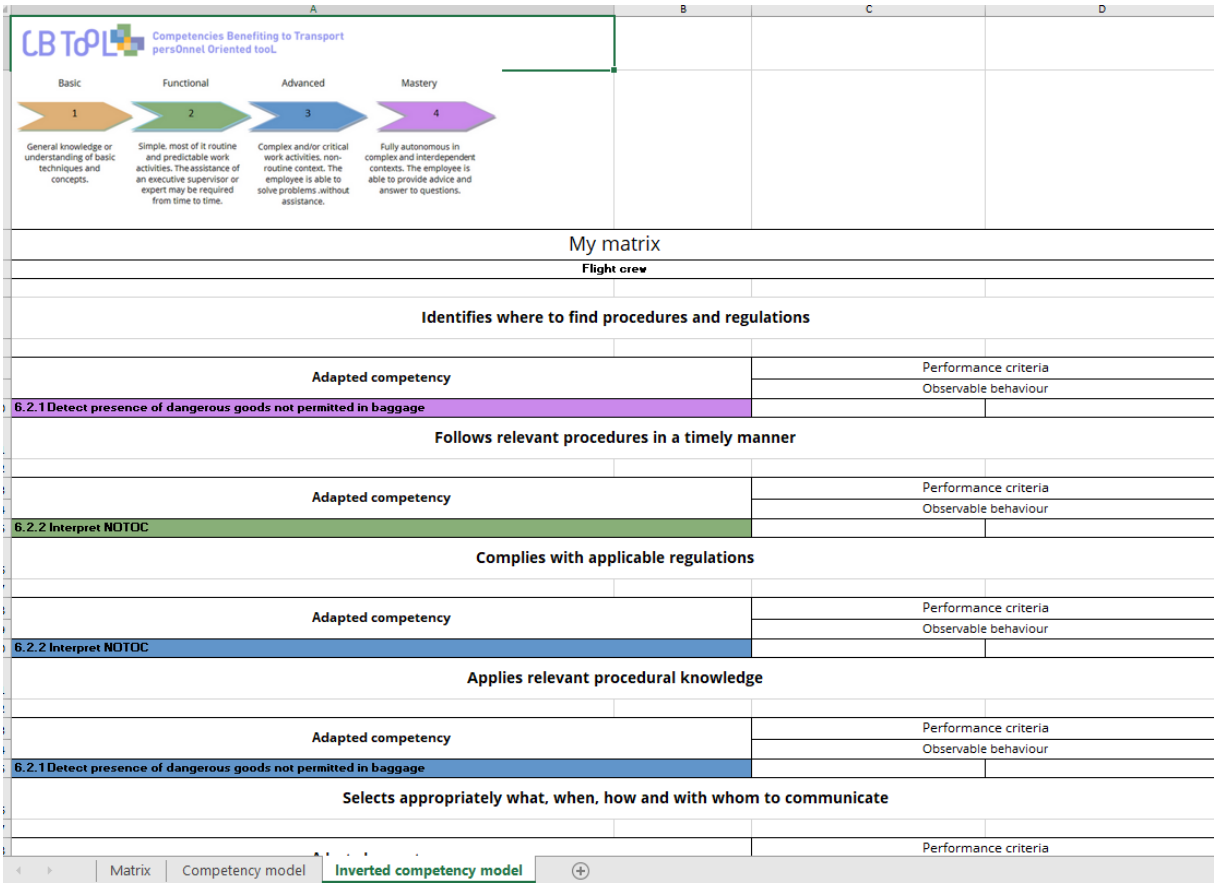
Adapted competency	Description	Performance criteria: Observable behaviour	Competency assessment	
Communication	Communicates through appropriate means in the work environment, in both normal and nonnormal situations	Selects appropriately what, when, how and with whom to communicate		

- Exporting the inverted competency model to Excel
-



- <u>Exporting the matrix and the models to Excel</u>

This option allows you to have the matrix and competency models in a single Excel document.



5.6. Return to the home page

Press the button “Back to homepage”

.

The team wishes you a good use of CBTool