

## ICAO CORSIA CO<sub>2</sub> ESTIMATION AND REPORTING TOOL (CERT) FREQUENTLY ASKED QUESTIONS (FAQS)

*Last update: December 2025*

### **Use of the CERT 2025 on Sharepoint/Onedrive – Why does the CERT 2025 not fully run when saved on a cloud-based folder?**

The CERT 2025 (and prior versions) requires Microsoft Visual Basic for Applications (i.e., VBA) functions in order to properly run. Certain VBA functions require the original document (i.e., the CERT tool itself) to be opened from a local folder rather than a cloud-based folder such as Sharepoint/Onedrive. To ensure full functionality of the CERT tool, it should be saved to a local folder (i.e., computer's hard drive) and opened using the desktop version of Microsoft Excel, rather than the web-based Excel application.

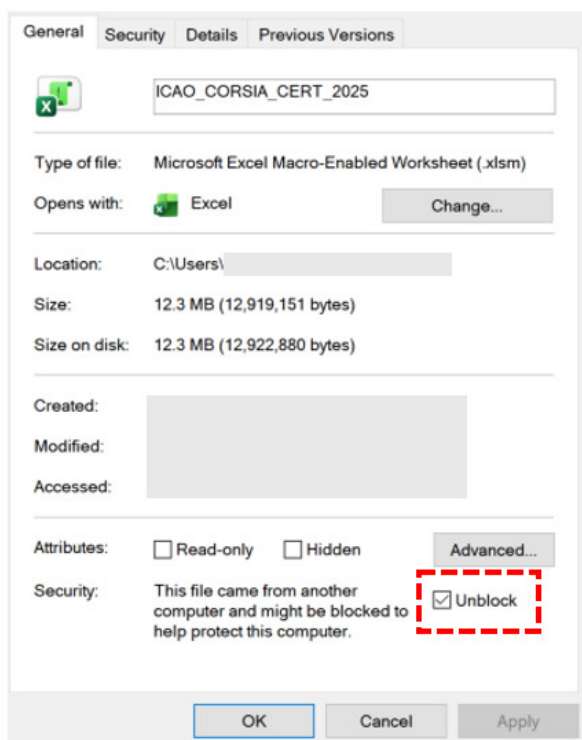
### **Web-based Excel application – Why does the CERT 2025 not fully run when opened on a web-based Excel version?**

The CERT 2025 is not designed nor tested under web-based Excel versions. It should be used under the desktop based version of Excel. This limitation is due to functionalities not available under web-based Excel versions.

### **Microsoft Excel Security warning on Macros – Why does Microsoft Excel display a security warning and block macros when opening the CERT 2025?**

By default, and for security reasons, recent versions of Microsoft Excel disable macros in files that have been downloaded. To allow the CERT 2025 to run properly, one of the following actions should be taken:

- 1) “Save As” the CERT 2025 in a local folder after opening it the first time or,
- 2) Right Click on the CERT 2025 file, select “*Properties*” and check the “*Unblock*” cell at the bottom of the *General* tab.



### **Emissions report in CERT 2025 – Which Emissions Report (ER) template is used in CERT 2025?**

The ER template in CERT 2025 has been updated as per the ER template contained in the 4th Edition of Doc 9501 — *Environmental Technical Manual*, Volume IV. This template has the same structure as the one used in CERT 2024, with new references to additional fuel types (i.e. TS-1 and No. 3 Jet) for alignment with the references to these fuel types in Annex 16, Volume IV.

### **Equivalent fuel types in ER - How should users report fuel types other than the ones included in CERT 2025?**

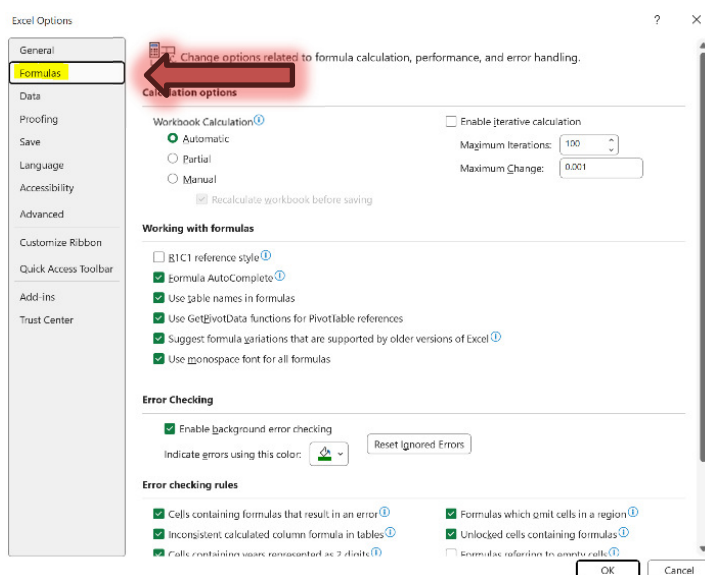
To ensure accurate and transparent reporting for summary and analysis, users should list equivalent fuel types as follows:

1. Define the most closely aligned fuel type from the existing options in CERT 2025.
2. State the fuel type used during operation and the corresponding equivalent fuel type in the *f) Fuel use monitoring method and / or the ICAO CORSIA CO<sub>2</sub> Emissions and Reporting Tool (CERT)* in the ER2 *Underlying Basic Information of the Emissions Report* spreadsheet. This information should be included in the Emissions Report.

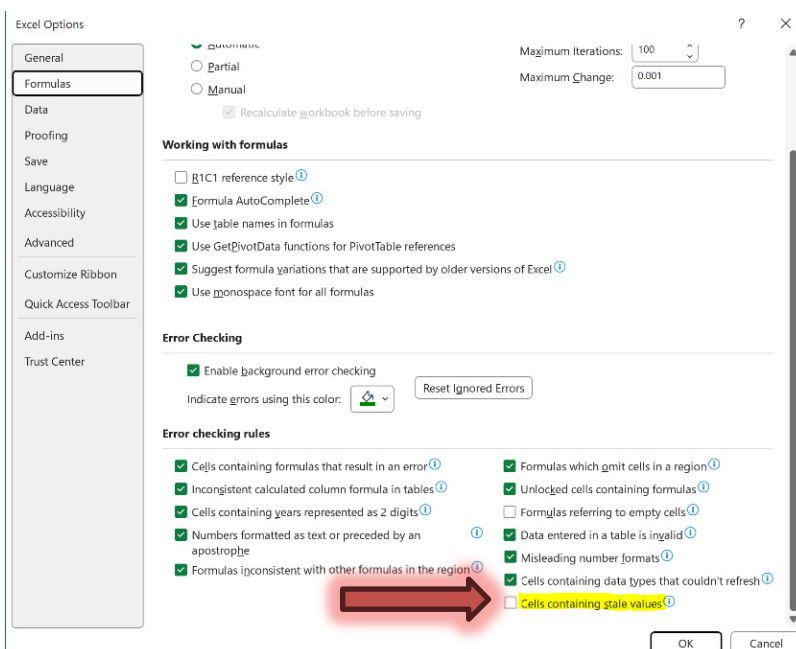
## Aeroplane operator information display in the PDF ER – Why does strikethrough text appear in the PDF ER?

The strikethrough text is caused by a new Excel feature; this feature, called “[Stale Value Formatting](#),” also affected the CERT 2024. To avoid strikethrough text in the PDF Emissions Reports, this Excel feature should be deactivated while using the CERT. This feature does not affect the result or the functionalities of the CERT, only the formatting of some text/data while exporting/printing the report to PDF. To resolve this issue, please follow these steps:

### Step 1: In Excel go to File -> Options -> Formulas



### Step 2: Unselect “Cells Containing stale values”



**Step 3:** Press Ok to close Options tab

**Step 4:** Generate ER in PDF format

### **Input data format (individual flight level or aggregated) – What is the appropriate format for the input?**

The ICAO CORSIA CERT allows users to provide traffic data either on the basis of a unique flight (i.e., the number of flights will be 1 for each entry) or in an aggregated format (i.e., the number of flights will be the sum of all the flights for each combination of ICAO Aircraft Type Designator and Aerodrome Pairs (departing and arriving aerodromes)).

Note: In the 2018 version<sup>1</sup> of the ICAO CORSIA CERT, the two data formats CANNOT be combined. From the 2019 version of the ICAO CORSIA CERT, the tool allows for partially aggregated Aeroplane Type and Aerodromes Pairs input.

### **Aerodromes – What should I do if an aerodrome code needed is not available in the ICAO CORSIA CERT?**

The ICAO CORSIA CERT uses the ICAO Doc 7910 – *Location Indicators*, for aerodromes identification as stated in the references table of the ICAO CORSIA CERT Background page. If the aerodrome code needed is missing, after you click “Estimate CO<sub>2</sub> Emissions” (on the worksheet “2. CO<sub>2</sub> Estimation” or “ER\_CO<sub>2</sub> Est”) and agree to compare the input to the ICAO CORSIA CERT databases (by clicking “Yes” on the pop-up window), the ICAO CORSIA CERT will detect aerodromes which are not embedded therein and will automatically propose to add them as custom aerodromes. In addition to the aerodrome code entered as input, the user will have to provide the following information: aerodrome name, latitude and longitude of the aerodrome, and indicate the ICAO Member State where the aerodrome is located. You are also invited to communicate with the ICAO CORSIA CERT Team via the email address [CERT@icao.int](mailto:CERT@icao.int) to notify ICAO of missing ICAO aerodrome codes.

### **Incorrect Aerodrome Information – What should I do if information on an aerodrome is considered not correct in the ICAO CORSIA CERT?**

It may happen that the name, coordinates or State name in which the airport is located are considered incorrect. You can amend the information relative to an airport by pressing the “Custom AP” button (located on the worksheet “2. CO<sub>2</sub> Estimation” or “ER\_CO<sub>2</sub> Est”). In the “Custom aerodrome information” worksheet, you need to enter the Aerodrome Code, Aerodrome Name, Latitude, Longitude, and the ICAO Member State name.

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<sup>1</sup> The 2018 version of the ICAO CORSIA CERT is no longer valid for CORSIA purposes but is archived on the CORSIA website.

Please take note that the "Already in CERT" message will appear if the aerodrome code exists already in the ICAO CORSIA CERT. This is a warning message: the ICAO CORSIA CERT giving always priority to Custom Aerodromes, the user is warned should (s)he have introduced mistakenly the code of an existing aerodrome.

If you consider that information related to an airport is incorrect, you are invited to bring this to the attention of the ICAO CORSIA CERT Team by sending an email to the following address [CERT@icao.int](mailto:CERT@icao.int).

### **Aeroplane Operators – What should I do if my ICAO Designator is not available from the dropdown menu?**

If the ICAO Designator is not available from the drop-down menu, the user should leave the field blank in the ICAO CORSIA CERT identification page. The only purpose of the ICAO CORSIA CERT "Aeroplane Operator Information" page is to tag the name of the operator on the summary assessment, which is requested as supporting information. You are also invited to communicate with the ICAO CORSIA CERT Team via the email address [CERT@icao.int](mailto:CERT@icao.int) to notify ICAO of missing ICAO Designators.

### **Aeroplane – What should I do if an aeroplane code needed is not available in the ICAO CORSIA CERT?**

If the aeroplane code needed is missing, after you click "Estimate CO<sub>2</sub> Emissions" (on the worksheet "2. CO<sub>2</sub> Estimation" or "ER\_CO<sub>2</sub> Est") and agree to compare the input to the ICAO CORSIA CERT databases (by clicking "Yes" on the pop-up window), the tool will automatically propose that you add a custom aeroplane. In addition to the aeroplane code entered as input, the user will have to provide the following information: aeroplane category (selected from the drop-down menu) and the average Maximum Take-off Mass (MTOM) in kilograms (kg). The average MTOM is calculated using the arithmetical average of individual MTOM of aeroplane in the fleet of a given aeroplane type code, divided by the number of aeroplane in the fleet of the given aeroplane type code. Once the aeroplane category and average MTOM have been entered, the custom aeroplane functionality displays information on the fuel burn rate (kg/km and kg/min from the 2019 Version of the ICAO CORSIA CERT) and intercept value (fuel at great circle distance of 0 km and fuel at block time of 0 minute from the 2019 Version of the ICAO CORSIA CERT), depending on the underlying regression model associated with the manually selected aeroplane category and average MTOM. The indicated fuel burn rate and interception value are used in the ICAO CORSIA CERT to calculate the estimated fuel burn and emissions for all flights with this Custom Aeroplane Code.

## Custom Aerodrome – Error codes

<b>E1</b>	<p>Symbols for Degree (°), Minute (') or Second (") are missing for the “<i>Latitude</i>” field. Please check that symbols in brackets (or any customized symbols) are not missing. Degree/Minute/Second format is by default as follow:</p> <ul style="list-style-type: none"> <li>- Latitude: 10° 20' 30.40" N or 10° 20' 30.40" S</li> <li>- Longitude: 100° 20' 30.40" E or 100° 20' 30.40" W</li> </ul> <p><i>Note: decimals are optional</i></p>
<b>E2</b>	<p>Symbols for Degree (°), Minute (') or Second (") are missing for the “<i>Longitude</i>” field. Please check that symbols in brackets (or any customized symbols) are not missing. Degree/Minute/Second format is by default as follow:</p> <ul style="list-style-type: none"> <li>- Latitude: 10° 20' 30.40" N or 10° 20' 30.40" S</li> <li>- Longitude: 100° 20' 30.40" E or 100° 20' 30.40" W</li> </ul> <p><i>Note: decimals are optional</i></p>
<b>E3</b>	Value for Degree is incorrect (latitude). This error code occurs if the value is not comprised between 0 and 90 degree(s) or if a non-numerical value is detected.
<b>E4</b>	Value for Minute is incorrect (latitude). This error code occurs if the value is not comprised between 0 and 60 minute(s) or if a non-numerical value is detected.
<b>E5</b>	Value for Second is incorrect (latitude). This error code occurs if the value is not comprised between 0 and 60 second(s) or if a non-numerical value is detected.
<b>E6</b>	Value for Degree is incorrect (longitude). Value is comprised between 0 and 90 degree(s).
<b>E7</b>	Value for Minute is incorrect (longitude). Value is comprised between 0 and 60 minute(s).
<b>E8</b>	Value for Second is incorrect (longitude). Value is comprised between 0 and 60 second(s).
<b>E9</b>	<p>Symbol for North (N) or South (S) is missing for the “<i>Latitude</i>” field. Please check that symbol in brackets (or any customized symbols) is not missing.</p> <p>Degree/Minute/Second format is by default as follow:</p> <ul style="list-style-type: none"> <li>- Latitude: 10° 20' 30.40" N or 10° 20' 30.40" S</li> <li>- Longitude: 100° 20' 30.40" E or 100° 20' 30.40" W</li> </ul>
<b>E10</b>	<p>Symbol for East (E) or West (W) is missing for the “<i>Longitude</i>” field. Please check that symbol in brackets (or any customized symbols) is not missing.</p> <p>Degree/Minute/Second format is by default as follow:</p> <ul style="list-style-type: none"> <li>- Latitude: 10° 20' 30.40" N or 10° 20' 30.40" S</li> <li>- Longitude: 100° 20' 30.40" E or 100° 20' 30.40" W</li> </ul>

<b>E11</b>	Value is incorrect after the decimal separator for the “ <i>Latitude</i> ” field. Please check that there is no character other than numerical values between the decimal separator and the symbol for the seconds.
<b>E12</b>	Value is incorrect after the decimal separator for the “ <i>Longitude</i> ” field. Please check that there is no character other than numerical values between the decimal separator and the symbol for the seconds.
<b>E13</b>	<p>Value is not numeric for the “<i>Latitude</i>” field. This error code occurs if a non-numerical value is detected.</p> <p>Decimal format is by default as follow:</p> <ul style="list-style-type: none"> <li>- Latitude: 10.20 or -10.20</li> <li>- Longitude: 150.50 or -150.50</li> </ul> <p><i>Note: decimals are optional</i></p>
<b>E14</b>	<p>Value is not numeric for the “<i>Longitude</i>” field. This error code occurs if a non-numerical value is detected.</p> <p>Decimal format is by default as follow:</p> <ul style="list-style-type: none"> <li>- Latitude: 10.20 or -10.20</li> <li>- Longitude: 150.50 or -150.50</li> </ul> <p><i>Note: decimals are optional</i></p>
<b>E15</b>	Value is incorrect for the “ <i>Latitude</i> ” field. Please check that the value is comprised between -90 and 90.
<b>E16</b>	Value is incorrect for the “ <i>Longitude</i> ” field. Please check that the value is comprised between -180 and 180.
<b>E17</b>	<p>Symbols order. This error code occurs if the symbols for Degree, Minute and Second are entered but not in the correct order.</p> <p>In this example, symbols for degree and minute (in red) have been switched:  10’ 20° 30.40” N instead of 10° 20’ 30.40” N.</p>

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