4C System Update 3  
09 January 2020

1. New BPM template 3.6 published
2. Updated 4C portal views
3. Use of the GRAS tool for risk-based sample calculation
4. Extension of the transition period on the clearance of non-conformities

1. New BPM template 3.6 published

A new Business Partner Map (BPM) template (version 3.6) has been published. The blank BPM template and an example can already be found in the documents list on the 4C website. The new BPM version 3.6 must be applied from now on for all future audits and Annual Updates (AUs). Currently ongoing processes may be concluded using the BPM version 3.5.

4C will convert all BPMs of currently certified 4C Units into the new BPM version over the upcoming weeks and share them with the respective Managing Entities (MEs) individually. Priority for this task will be based on the dates scheduled for the next follow-up audits, recertifications and annual updates. This will reduce the risk of users investing time using the old template.

What’s new?

- The upload of the BPM version 3.6 in the 4C portal facilitates the application of improved features.
- BPMs are uploaded to the 4C portal, which presents to the user a summary report on the business data of the 4C Unit as well as an automatic error checking.
- The physical and commercial coffee flows are directly generated from the data of the excel sheet, and the 4C portal draws the respective diagrams accordingly, eliminating the need to set up a separate coffee flowchart document.
- Business Partners (BPs) are shown on an interactive map based on the entered geo-coordinates.

For more technical details, please read the included guidance worksheet inside the BPM template and watch the demonstration video with subtitles in Spanish, Portuguese, and Vietnamese.
2. Updated 4C portal views (relevant for 4C responsible persons at MEs & CBs)

In conjunction with the release of the BPM 3.6, we have adjusted the navigation on the 4C portal and presentation of information. Users are now able to better follow basic historical information about their own 4C Units.

The menu item “Certification Processes” has been adjusted to only show ongoing processes or recently issued certificates to focus on what’s currently relevant to the user.

The new menu item “4C Units” presents the user with a list of 4C Units, which are connected to the user’s account. Users can navigate to a detailed page of each 4C Unit and from there on, navigate to individual certification processes.

Confidentiality of information is of course critical to 4C. Users from a certain ME will never have access to information about 4C Units of a different ME, unless the exceptional responsibilities have been assigned as such and properly communicated to 4C.

In the same way, staff of Certification Bodies (CBs) are only able to access 4C Units and processes for which the CB performed or will still perform the audit.

3. Use of the GRAS tool for risk-based sample calculation

The procedure for risk assessment and sample size calculation and selection consists of the following steps:

1. Identification of the GRAS index only for BP Producers
2. Analysis of risk indicators for BP Producers and BP Service Providers separately
3. Definition of final risk levels
4. Calculation of the minimum size of samples
5. Selection of samples

Figure 1: Risk assessment and sample size calculation and selection procedure
Identification of the GRAS index for BP Producers

The auditor must identify the GRAS index\(^1\) for the BP Producers of a 4C Unit by using the GRAS tool\(^2\).

The use of the GRAS tool is mandatory for all types of 4C audits, except for follow-up audits.

The GRAS index ranges and respective risk levels yielded by the GRAS tool are:

<table>
<thead>
<tr>
<th>GRAS index range</th>
<th>Respective risk level per GRAS index range</th>
</tr>
</thead>
<tbody>
<tr>
<td>0 – 0,2</td>
<td>Low</td>
</tr>
<tr>
<td>0,2 – 0,4</td>
<td>Medium</td>
</tr>
<tr>
<td>&gt; 0,4</td>
<td>High</td>
</tr>
</tbody>
</table>

*Table 1: GRAS index ranges and respective risk levels yielded by the GRAS tool*

To obtain the GRAS index of a 4C Unit, the geographical coordinate (longitude and latitude) of the central point, as well as the radius of each sourcing area\(^3\) in the 4C Unit, must be entered in the GRAS tool.

Watch the video with a detailed description of this process.

Only BP Producers listed in the BPM being presented by the ME at the application for a 4C audit, should be considered for the analysis to determine the central point of the area and its radius.

For addendum audits, only the new BP Producers being included in the 4C Unit are to be considered as the basis for the identification of the GRAS index.

For those 4C Units where there are clearly multiple sourcing areas due to the existence of evident geographical clusters of BP Producers, the identification of the central point and radius should be done per cluster. In this case, after obtaining the GRAS index per cluster, a weighted average must be calculated based on the quantity of BP Producers per cluster, in order to obtain one final number (index) for all BP Producers in the 4C Unit. This final number must be matched with the level of risk defined by the GRAS tool (table above).

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\(^1\) The GRAS index is an overall risk score which merges relevant data on biodiversity, land use change, carbon stock, and social indices on specific regions.

\(^2\) The GRAS tool is currently the only tool offering the risk analysis as required by 4C. Should other tools become available covering the same criteria and analysis approach, these could also be applied.

At the moment of publication of this 4C System Update, the following coffee producing countries are covered by the tool: Brazil, Colombia, Mexico, Guatemala, Honduras, Peru, the Democratic Republic of Congo, Indonesia, Malaysia, Kenya, Vietnam and Thailand. Additional countries are continuously being added to the tool.

\(^3\) Sourcing area is the area where the BP Producers of a 4C Unit are located. BP Service Providers are not to be included in the analysis of the sourcing area.
E.g. a 4C Unit with a total quantity of 350 BP Producers is geographically located in two different clusters (sourcing areas):

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Quantity of BP Producers</th>
<th>GRAS Index</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>100</td>
<td>0.03</td>
</tr>
<tr>
<td>2</td>
<td>250</td>
<td>0.22</td>
</tr>
</tbody>
</table>

\[
\frac{100 \times 0.03 + 250 \times 0.22}{100 + 250} \approx 0.17
\]

\[
0.5 \times \sqrt{100 + 250} = 9.35
\]

Figure 2: Identification of GRAS index and respective risk level

In this example, because the weighted average result falls in the lower range of the GRAS index, the risk level to be used is low and leads to the application of the factor 0.5 times the square root.

**Analysis of risk indicators for BP Producers and BP Service Providers**

After identifying the GRAS index for BP Producers of a 4C Unit, the auditor must analyze, as a minimum, the following additional risk indicators:

- Quality of MEs Internal Management System (IMS): self-assessments made by ME, risk/needs assessments made by ME, BPM data quality, robustness of training plans, and improvement plans, etc.

- Presence of BPs or of the ME itself in national government ban lists on any of the issues covered by the 4C Unacceptable Practices (UAPs)

- History of the 4C Unit: past suspended certificates, non-conformities identified in previous audits, risk to any 4C UAP, indication of non-conformities through public statements made by the media, watchdog organizations reports/releases, stakeholders, etc.

- Geographic conditions: located in declivity areas, natural disaster-, social conflict- or land use conflict zones, etc.

- Volumes handled by BP Service Providers of the 4C Unit: Analysis of the 4C Unit’s commercial/physical coffee flow chart and respective volumes handled by each BP Service Provider, which can be extracted from the BPM.

The auditor must also analyze the potential risks of non-conformity to all 4C requirements in the 4C Unit.
As for BP Service Providers of a 4C Unit, the auditor may skip the use of the GRAS tool, but must analyze the above stated minimum additional risk indicators, as well as the potential risks of non-conformity to all 4C requirements.

**Definition of the final risk levels for a 4C Unit**

The auditor must define two separate final risk levels, low, medium or high: one risk level for BP Producers and one risk level for BP Service Providers.

**BP Producers:**

The GRAS index of the sourcing area (or multiple sourcing areas) in a 4C Unit is the predominant risk level which must be applied. But the GRAS index level can be increased (never lowered) in case the auditor comes to a different conclusion from the analysis of the above stated minimum additional risk indicators, as well as the potential risks of non-conformity to all 4C requirements. After this, the auditor must define which final risk levels will be applied in the audit.

For 4C Units with BP Producers located in a country which is not yet covered by the GRAS tool at the moment of the risk assessment for a 4C audit, auditors must use other remote sensing tools to identify potential risks which could be seen through satellite images. In addition to that, the auditor must analyze the above stated minimum additional risk indicators, as well as the potential risks of non-conformity to all 4C requirements.

**BP Service Providers:**

In order to define the risk level for the BP Service Providers of a 4C Unit, the auditor may skip the use of the GRAS tool, but must analyze the above stated minimum additional risk indicators, as well as the potential risks of non-conformity to all 4C requirements.

**Calculation of the minimum size of 4C samples**

After defining the final risk levels of BP Producers and BP Service Providers in the 4C Unit, the minimum sample size must be calculated separately for each, using the factors shown in the table below.

The result of each calculation must be rounded up to the nearest whole number.

<table>
<thead>
<tr>
<th>Risk levels</th>
<th>Factors square root</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low</td>
<td>minimum 0.5 times the square root</td>
</tr>
<tr>
<td>Medium</td>
<td>minimum 1.0 times the square root</td>
</tr>
<tr>
<td>High</td>
<td>minimum 1.5 times the square root</td>
</tr>
</tbody>
</table>

*Table 2: Factors of the square root to be applied for different risk levels*

For the 4C audits where the ME is to be audited, it is always counted apart from the defined minimum quantity of BP Producers and BP Service Providers.
Either or both calculated sample sizes can be increased during the audit at auditor’s discretion, in case it becomes evident during the audit that the risks are actually higher than what was defined during the desk analysis.

Selection of the 4C audit samples

The selection of both samples, one for BP Producers and one for BP Service Providers, is up to the judgement of the auditor, as long as the following conditions are met:

For certification audits, the samples must contain new and old BPs, both in the sample of BP Producers and in the sample of BP Service Providers. The ME is always audited against the full audit checklist for MEs.

For addendum audits, the samples must contain only new BPs, both in the sample of BP Producers and in the sample of BP Service Providers. The ME is always audited, but only against the IMS check points of the ME audit checklist.

For certification and addendum 4C audits, the following conditions must also be met:

- At least one of each type of the BP Service Providers existing in the 4C Unit must be included in the sample, even if this requirement leads to increasing the result of the square root factor used, thus consequently increasing the size of the sample. BP Service Providers with multiple functions should be considered as one additional type. For example, if there are three BP Service Providers, one trader, one wet mill, and one trader and wet mill, these should be considered as three different types of BP Service Providers.

- Samples must be as representative as possible, covering BPs with different characteristics such as: region/clusters/locations, volumes of coffee produced by BP Producers, volumes of coffee handled by BP Service Providers, yields, farm sizes, distances to the ME, use/non-use of water by mills, quantity of workers, quantity of farms per producer, quantity of facilities per BP Service Providers, etc.

4. Extension of the transition period on the clearance of non-conformities

As has been communicated in the 4C System Update issued on 1st April 2019, a transition period until December 2019 has been granted to allow 4C Unit’s to have a certificate issued despite the fact of non-conformities being present during the audit (excluded from this exception are UAPs, where non-conformities are not accepted). This transition period will be extended until 30 June 2020. A prerequisite is to include any non-conformities in the Improvement Plan (IP) in order to ensure that these non-conformities are cleared by the time of recertification, since progress regarding the corresponding actions are reported during the AUs.