# Puratos' Sustainable Cocoa Program and Verification Standard

English - Version 5.0 –2019

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# PURATOS IN BRIEF

Puratos is an international group, which offers a full range of innovative products and application expertise for artisans, industry, retailers and food service customers in the bakery, patisserie and chocolate sectors. Our headquarters are located on the outskirts of Brussels, Belgium, where the company was founded in 1919. Puratos comprises more than 9000 employees and our products and services available in over 100 countries around the world.

## Why have a sustainable cocoa sourcing program?

As a global manufacturer of real chocolate, as well as compound chocolate and fillings, cocoa ingredients are strategic raw materials for our factories all over the world. Cacao-Trace™ is our sustainable cocoa sourcing program that is raising the bar for chocolate, by focusing on superior taste. This begins with our local post-harvest centers, where experts are setting new standards for the fermentation process. The superior taste of our chocolate, made possible by Cacao-Trace™, benefits all of us. In particular, the cocoa farmers, who receive an extra Chocolate Bonus for every kilo of chocolate sold. The proof of the program is in the taste, and in the improved quality of life for our cocoa farmers. Cacao-Trace™ is powered by passionate communities in five cocoa regions, by Puratos, and by thousands of chocolate lovers worldwide. We are all united by the belief that creating better chocolate together is the only way to sustainability.

# BECOMING FAMILIAR WITH THE CACAO-TRACE™ STANDARD

Cacao-Trace™ stands for superior tasting, sustainable chocolate. Fermentation is at the heart of the Cacao-Trace™ approach and is the foundation upon which we create a positive impact. In each Cacao-Trace™ growing region we share our know-how on fermentation, which is a result of extensive research and fine-tuning, in order to develop exceptional tasting chocolate. Chocolate producers and consumers alike can rest assured that Cacao-Trace™ stands for outstanding flavor, quality, and transparent sourcing from sustainable cocoa beans. By adopting a continuous improvement approach, Cacao-Trace™ directly answers the needs of cocoa producing communities to enable them to obtain the highest possible income and to manage their plantations with greater autonomy.

The Cacao-Trace™ Standard is a sustainability standard, a set of criteria defining practices which cover seven (7) different principles against which each Entity is verified. This document provides a monitoring and evaluation framework, in order to drive sustainable improvements in our Cacao-Trace™ grower communities.

# REFERENCES

The document follows internationally recognized standards and conventions, particularly those of the International Labour Organization (ILO) and International Standard Organization (ISO). When standard requirements are higher than ILO, or not covered, then the national legislation in the countries where Cacao-Trace™ is implemented is applied.

# WHAT ARE CACAO-TRACE™ BEANS?

Cacao-Trace™ verified dry beans are the basis of every Cacao-Trace™ chocolate product. The beans must exclusively come from the Cacao-Trace™ supply chain and respect Segregation, as defined by the standard described within this document. Fermentation and processing of the beans follows strict steps to enhance and preserve exceptional flavor and ensure consistently high quality.

# HOW SHOULD YOU READ THE STANDARD?

The current Cacao-Trace™ Standard defines the Requirements to produce Cacao-Trace™ verified dry cocoa beans.[1] The Requirements are grouped into seven principles and guide the best practices of sustainable cocoa production, from cocoa pod production to the storage of packed dry cocoa beans. Each level of the supply chain is audited according to these principles, in order to assess their compliance.

## Cacao -Trace Standard is applied at 3 levels

Depending on the context, the Organization of the supply chain can vary. Puratos has identified three main levels:

| Level | Definition |
| --- | --- |
| **Entity** | A business unit that is in charge of the Organization and management of implementing the Cacao-Trace™ Standard. The business unit can be Puratos Headquarters or any of its subsidiaries or chosen external partners. If responsibility for one supply chain is shared between more than one unit, the Internal Management Committee (IMC) should include representatives from all respective units. |
| **Post-Harvest Unit** | A unit where the cocoa post-harvest process (from the pods /wet beans to the dry beans) takes place. This unit can either be a large to medium scale processing unit or a small scale collector and fermenter. |
| **Production Unit** | A unit that is growing Theobroma trees and producing cocoa pods. In some countries, Production Units can also take over the Post-Harvest process at the same level. In this case, they deliver dry beans to Puratos or an affiliated partner in the Cacao-Trace™ supply chain. |

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*1 For semi-finished and finished goods please reference, Cacao-Trace™ Semi-Finished Goods Manual & Cacao-Trace™ Story Telling Do's and Don'ts.*

## The Cacao-Trace™ Standard has 7 principles

More than 60 Requirements are grouped into 7 principles, which are applied at the 3 levels defined above.

**Principle 1** > Legal Responsibility and Management

**Principle 2** > Quality and Traceability

**Principle 3** > Economic Responsibility

**Principle 4** > Social Responsibility

**Principle 5** > Health and Safety

**Principle 6** > Best Agricultural Practices

**Principle 7** > Environmental responsibility

## In each principle section you will find:

- The intent and scope of application
- The Requirements on what will be audited
- Guidance to help interpret these Requirements/criterion

For more details on how each principle is evaluated please refer to the Cacao-Trace™ Standard Checklists. Depending on the program, not all questions are mandatory. For example, certified Organic programs are not evaluated for fumigation or proper handling of agro-chemicals.

## There are 3 different scenarios where the Requirements should be verified:

- **Case 1:** All the post-harvest processes take place in the Post-Harvest Unit
- **Case 2:** The post-harvest processes take place in the Production Unit under farmer supervision.
- **Case 3:** A mix of Case 1 and 2 where the post-harvest processes take place partially at the Production Unit and partially at the Post-Harvest Units.

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# HOW DOES THE VERIFICATION PROCESS WORK?

## Application Procedure

Applicants interested in becoming Cacao-Trace™ verified must contact Puratos directly, for a pre-assessment. The following information must be provided:

- ✓ Name and legal identification of the Entity
- ✓ Contact information of the Entity
- ✓ Name and location of the Post-Harvest Units
- ✓ Locations and areas of the Production Units
- ✓ Production and processing capacity
- ✓ Number of working personnel

Once the pre-assessment is validated by Puratos, the legal Entity can enter into the cycle of evaluation.

## Cycle of Evaluation

In order for a supply chain to be verified as Cacao-Trace™, Applicants must be able to demonstrate compliance with the minimum requirements of the Cacao-Trace™ Standard, through an independent assessment by a Verification Body approved by Puratos.

The Verification Body (VB) must be approved by Puratos and be accredited to EN45011/ISO/IEC Guide 65:1996 (General Requirements for Bodies Operating Product Certification Systems) as well as ISO 17065 (Requirements for bodies certifying products, processes and services).
Only accreditation issued by an Accreditation Body who is a Member of the International Accreditation Forum, makes a VB a candidate for this standard as well (proxy accreditation).

The chosen Verification Body will draw up a contract between the Applicant and the Verification Body, detailing the necessary Requirements and commitments from the Applicant in order to comply with the Cacao-Trace™ audit.

There will be a three-year verification cycle including an initial verification audit, surveillance audits in the following two years, and a re-verification audit in the fourth year prior to expiration of the verification statement. In order to maintain compliance, the frequency of each audit will be once per year.

| Audit | Definition |
|---|---|
| **First year: Initial verification audit** | Should be carried out for first-time verification. **Scope:** Covers the three levels, Entity, Post-Harvest and Production Units, by following the defined sampling procedure. **Purpose:** To verify compliance with the Requirements. **Noncompliance:** The Entity cannot be verified as Cacao-Trace™ Standard compliant, but Puratos can propose a transition[2] period of 1 year |
| **Second and third year: Surveillance audits** | Should include 1 audit per year with a frequency of every 12 months. **Scope:** Covers the three levels, Entity, Post-Harvest and Production Units. For Production Units, the necessary sample size is calculated as half the square root of the total number of Production Units. **Purpose:** To ensure the continuing implementation of the Requirements. **Noncompliance:** Corrective actions must be completed within 90 days, or the Entity loses its verification |
| **Fourth year: Re-Verification audit** | Should be carried out after 3 years of verification, a maximum of 90 days before the expiry date of the verification statement. **Scope:** Covers the whole system (from the farm to the Processing and Production Units) and supporting documentations. **Purpose:** To evaluate the continuous fulfilment of and improvements relating to the Requirements. **Noncompliance:** Corrective actions must be completed before expiry of the current verification statement, or the Entity loses its status. |
| **Program expansion** | In the case that the farmer group (Production-Unit) has grown by more than 10% (through new additions), then the sampling method used in the initial verification audit will be applied. |

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*2 The definition of transition is given on page 14*

## Sampling Procedure

**The square root of Production Unit's size is considered as follows**

Cacao-Trace™ targets farmers who make their living from Cacao. Thus very small farmers are categorized for the purpose of selecting a sample. The sample size will be determined based either on the number of trees or on the volume (dry bean equivalent sourced). Only one of the methods can be applied. The square root of a Production Unit's size is therefore considered as follows:

**Method 1: Dry bean equivalent**

Dry bean equivalent should be used if there are actual records available from the previous year.

Production units will be divided into two categories: small (<100 kg of dry bean equivalent per year) and big (> 100kg of dry bean equivalent per year). The sample will be created by taking the square root of the total. This number will then be applied to the ratio of the small/big farms versus the total, with only ½ the square root being applied to the small ratio.

**Example:**

The total number of farmers is 400. From this, 100 farmers have > 100kg of dry bean equivalent and 300 have < 100kg of dry bean equivalent. The square root of the total number of farmers (400) is 20. In this case for the big farms 100/400*20 = 5 farms will be verified. For small farms (300/400)*(20/2) =7.5 farms will be verified.

**Method 2: Tree count**

Tree count should only be used if there are no records of actual dry bean equivalent volumes delivered from the previous year.

Production units will be divided into two categories: small (< 100 trees) and big (> 100 trees). The sample will be created by taking the square root of the total. This number will then be applied to the ratio of the small/big farms versus the total, with only ½ the square root being applied to the small ratio.

**Example:**

The total number of farmers is 400. From this, 100 farmers have > 100 trees and 300 have < 100 trees. The square root of the total number of farmers (400) is 20. In this case, for the big farms 100/400*20 = 5 farms will be verified. For small farms (300/400)*(20/2) = 7.5 farms will be verified.

## The square root of a Post-Harvest Unit's size is considered as follows:

Sample size = square root (total number of Post-Harvest Units)

The Auditor ensures the representativeness of sampling in their selection of Post-Harvest Units to visit (volume produced, number of workers etc…).

## The Entity

For the Entity, the square root is not applicable. Any structure below the entity should be audited.

## The surveillance audits

If 10% or more of the initial number of farms are added during the 2 or 3 year cycle, the verification body has to perform a verification as per an initial audit.

If the number of additional farmers is fewer than 10% of the initial total verified farmer base, a surveillance audit, which consists of 50% of the initial audit, is sufficient.

Re-certification audits are carried out as per the initial audit, every 4 years. The sample should include 50% of all the production units that were evaluated during the 1st evaluation. This is to verify the improvement from the previous evaluation cycle.

## Duration of Evaluation

The Verification Body must also ensure that the duration of each audit is "reasonable and realistic" without excessive constraints on the Auditor or Auditee.

The audit duration may also depend on a number of factors, but in all cases should be sufficient to ensure that a full evaluation against all Requirements is achieved.

A complete audit will consist of five elements:

1 - Opening meeting;
2 - Collection of any necessary indicators and guidance documents;
3 - Entity/Post-Harvest/Production Units assessment;
4 - Review of management systems / records and procedures;
5 - Closing meeting with validation of the list of non-conformities.

A representative of Puratos must take part in the opening and closing meetings, either in person or remotely. Puratos will share challenges and progress in the annual sustainability report.

# ASSESSMENT OF COMPLIANCE

## Scoring system and continuous improvement

A detailed scoring system provides guidance for the auditor on how to score each Requirement as follows:

Each principle is divided into Requirements, with a potential total value of 3 points.
Details of the number of points per principle is detailed in the table below.

| Principle | 1 | 2 | 3 | 4 | 5 | 6 | 7 |
|---|---|---|---|---|---|---|---|
| Number of Requirements | 4 | 15 | 4 | 10 | 5 | 10 | 5 |

In some circumstances, particular questions are not applicable and are therefore not mandatory. In cases where the question is not applicable, 3 points will be subtracted from the denominator so that the question will not impact the overall score.

### The scoring is broken down into 3 parts:

1. **Average per principle per level:** The total number of points will determine an average score for each of the seven principles, at each of the 3 levels: Entity, Post-Harvest and Production Unit.
2. **Global average per principle:** The average score for every one of the 7 principles per level (Entity, Post-Harvest and Production Unit) is then added together in order to obtain the overall score for each of the 7 principles.
3. **Overall global average:** The final score for the whole supply chain is calculated by assigning around 14% to all principles and the corresponding weighted system, as explained in Annex 2.

## Requirements

Each principle is evaluated on sub-requirements assessed via a checklist of questions.
There are two question types:

- Questions requiring **Yes** or **No** answers;
- Questions with four different levels of compliance score, where the Auditor must select a level accordingly.

| Rating | Status | Explanations |
|---|---|---|
| 0 | Need for implementation | The Requirement is not met |
| 1 | Needs major improvements (starting situation) | The Requirement is being implemented, even if only partly implemented |
| 2 | Needs minor improvement (close to good) | Requirement is planned and monitored by the internal control system but some evidence shows lack of full compliance |
| 3 | Satisfactory | Requirement is implemented with enough evidence of its implementation |

## Different tiers of compliance with the Cacao-Trace™ Standard

Cacao-Trace™ is a demanding standard with two main aims: to provide customers with high quality chocolate, and to give each cocoa producing community the opportunity to take part in an improvement process, following the seven principles of the Cacao-Trace™ Standard.

To ensure consistent quality of the products, and to demonstrate that the supply chain is involved in a process of continuous improvement, we require a minimum threshold of compliance with the Requirements in order for Units to be verified as meeting the Cacao-Trace™ Standard.

Based on the scoring system (from 0 to 3) explained above, a percentage of compliance will be calculated for each principle, at each level of the supply chain, and a global percentage of compliance for the supply chain as a whole.

**Verification will be awarded where there is compliance as below:**
- **Minimum 60% pass** of total scored points (Initial audit & Surveillance audit);
- **Minimum 60% pass** of scored points for the Quality and Traceability Principle.

The Auditor should justify their scoring with supporting evidence.

To encourage continuous improvement, three tiers of compliance are identified, based on the % of total points scored on the supply chain:

| Compliance | Definition |
| --- | --- |
| **Basic Compliance** | **Scoring from 60- 75% of total available points** and scoring a minimum of 60% of points for the Quality and Traceability Principle |
| **Intermediary Compliance** | **Scoring > 75% to 90% of total available points** and scoring a minimum of 75% of points for the Quality and Traceability Principle |
| **Advanced Compliance** | **Scoring > 90% of total available points** and scoring a minimum of 90% of points for the Quality and Traceability Principle |

The context of each country can vary greatly and implementation of the Cacao-Trace™ Standard must be adapted to these unique situations. Nevertheless, as continuous improvement is the cornerstone of the Cacao-Trace™ process, each Entity should follow the guidelines and recommendations below:

- It is highly recommended for the Entity to increase its tier of compliance from the Basic Compliance to the Intermediary Compliance, or from the Intermediary Compliance to the Advanced Compliance, within 3 years. The improvement objectives should be determined jointly by Puratos and the Entity concerned.

When the Entity has passed the Cacao-Trace™ audit, the Verification Letter will be issued within 15 working days after the audit date. The Verification Letter is the property of the Entity.

## Preliminary stage of new Cacao-Trace™ programs

In the case of new country programs being opened, the initial year will be considered as a preliminary stage, with the status of the Entity classed as "in transition". This status was created to allow a new Entity (and its supply chain) to be part of the Cacao-Trace™ system whilst it works towards reaching the minimum Requirements of the "final verification" i.e. 60% (Basic Compliance).

Each new program is carefully selected to be part of Cacao-Trace™ and must be found to meet the Requirements through internal inspection. Given the high caliber of programs selected for Cacao-Trace™, we expect that within one year a Preliminary stage Entity will reach the minimum compliance tier by the time of the official verification.

In order to ensure that the Entity is on the right track, 6 months from the program's launch, an internal audit will be conducted using the Cacao-Trace™ Standard checklist to track progress and assess the next steps. The official 3rd party verification will take place 1 year after the program's initiation.

During the Transition period, the cocoa produced is considered as Cacao-Trace™ only if the Applicant reaches 60% compliance with the Quality and Traceability Principle and if no red flags have been detected. The stakeholders should benefit from the program (e.g. through bonuses, training, and technical support). If the compliance in terms of Quality and Traceability falls below 60%, the cocoa is sold as conventional cocoa. This Transition period cannot last more than one year.

If the Entity does not pass the official verification after the initial year, they must pass the re-audit within 90 days. If the Entity fails to pass the verification with a sufficient score, the beans will not be considered as Cacao-Trace™ and will be sold as conventional beans.

## Procedure in case of insufficient global score after being verified as complying with the Cacao-Trace™ Standard

### Surveillance or re-verification audit

It is not possible to downgrade from "verified" to "in transition". In case an audit leads to a downgrade, the statement holder will need to implement major improvements based upon the non-compliance findings (a score of 0 or 1) to achieve its previous compliance tier. Evidence for corrective action should be provided within 90 days:

- Through documented proof;
- Or through an additional audit.

The choice of the verification method depends on the severity of the non-compliance (score of 0), and is decided by the Auditor.

If the Entity fails to reach its verified status within 90 days, it will no longer be considered as Cacao-Trace™ verified.

The Puratos Sustainable Cocoa Program and Verification Standard

# PAYING ATTENTION TO RED FLAGS

Demonstrating respect for some basic rights is necessary to be Cacao-Trace™ verified. In addition to the monitoring systems required by the standard, a red flag system has been developed at the Puratos level.

Red flags concern the following Requirements:

- Internal Management Committee;
- Property rights/ ownership;
- Legal compliance activities;
- National and international labor laws;
- No child labor;
- Access to education;
- No forced labor;
- No discrimination;
- Gender equality;
- Wages and benefits.

A red flag is a special point of attention on the checklist. In case of non-compliance with the Requirements classed as red flags, this is immediately highlighted by the audit system and, a detailed explanation of the context should be given by the Auditor, as a basis for an analysis.

Puratos takes red flags into serious consideration and sees them not only as an individual issue but as a representation of a potentially more extensive problem. For this reason, if a red flag is identified, there will be clear actions taken in response to the findings to improve the overall supply chain.

Depending on the severity of the situation, Puratos can decide to:

- Expand the scope of the audit for this Entity, by increasing the sample size;
- Define special corrective actions;
- Exclude individuals from the program;
- Halt the verification process with the Entity, in which case the cocoa beans would not be verified as Cacao-Trace™.

The alarm points will be mentioned in the annual report to provide transparency to the stakeholders in our cocoa supply chain.

# REVIEW PROCESS

Because sustainability is a dynamic process, this standard will be reviewed on a continuous basis and improved and adapted as necessary.

For any suggestion please contact:
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# EXPLANATION OF THE REQUIREMENTS

## 1.  PRINCIPLE 1 – LEGAL RESPONSIBILITY AND MANAGEMENT

**Purpose:** To ensure that the Cacao-Trace™ program fits with local legislation at Entity, Post-Harvest and Production Unit level.

### 1.1  Internal Management Committee
**Guidance:**
The Internal Management Committee (IMC) is responsible for the implementation of the Cacao-Trace™ Standard. Each country should have an IMC. The Entity is responsible for clearly defining roles and responsibilities within the IMC.

The IMC is responsible for conducting a context assessment, which identifies the most relevant needs, and covers the seven principles. From this assessment, an Action Plan and roadmap should be produced and made available to the Auditor. They will use this to crosscheck with the checklist questions, in order to evaluate progress on topics that are difficult to detect or tackle in the short term. For example, questions relating to gender equality, education and environmental protection. Implementation of the standard should be carried out using a clear process and control system, which tracks progress against the defined Action plan and roadmap.

*\*This Requirement is considered as a red flag. Any non-compliance (scoring 0 on the checklist) results in a mandatory Action Plan to address the issue.*

### 1.2  Property Rights / Ownership
**Guidance:**
All levels should comply with local and national laws relating to legal rights for land use.

The Entity is responsible for recording and cross-referencing production locations in order to avoid sourcing from protected forests and lands. This must be supported with appropriate documentation of farm locations.

*\*This Requirement is considered as a red flag. Any non-compliance (failure to comply with the law) will be taken seriously and will require a mandatory follow-up plan.*

### 1.3  Legal compliance activities
**Guidance:**
All levels should comply with local and national laws relating to business and operating activities.

The evaluation should assess evidence that describes the business and operating activities.

*\*This Requirement is considered as a red flag. Any non-compliance (failure to comply with the law) will be taken seriously and will require a mandatory follow-up plan.*

### 1.4  Environmental regulations
**Guidance:**
The levels should comply with local and national laws relating to environmental protection.

The evaluation should assess evidence that proves compliance with applicable environmental regulations.

# 2. PRINCIPLE 2 – QUALITY & TRACEABILITY

**Purpose:** To ensure optimal and consistent quality with assurance of physical traceability, from cocoa pods to dry cocoa beans.

**Overview:** Quality and traceability of the beans are the basis for ensuring high quality chocolate and good organization and monitoring of the supply chain.
All procedures and guidelines relating to quality are to be approved by Puratos as per the Cacao-Trace™ Standard. These procedures and guidelines are IP and not available to the public.
The Traceability management system must be approved by Puratos and accompanied by internal audits.

## 2.1 Quality Control

### 2.1.1 Receiving raw material
**Guidance:**
Depending on the scope of operating activities, the Entity should have procedures to control the receipt of cocoa pods and cocoa wet beans, with clearly recorded definitions of acceptable quality.

The evaluation should verify procedures and their implementation, as well as assess information (i.e. records) that describes the process of receiving raw materials, when auditing the reception zone.

### 2.1.2 Pod breaking process
**Guidance:**
To avoid damage and contamination to the beans, pod breaking should be conducted in an appropriate manner. Once a sufficiently large quantity of pods have been harvested, the pods must be broken and the beans extracted. In order to avoid bean loss due to diseases, it is best to do this straight away or within a couple of days after harvesting.

The evaluation should verify procedures and their implementation, as well as assess information (i.e. records) that describes the pod breaking process and the sorting of the fresh beans (damaged, germinated beans).

### 2.1.3 Fermentation process
**Guidance:**
Fermentation of wet beans must be done in accordance with the Cacao-Trace™ recommended processes.

The evaluation should verify procedures and their implementation, as well as assess information (i.e. records) that describes the fermentation process of the cocoa beans.

### 2.1.4 Drying process
**Guidance:**

After fermentation, the cocoa beans must be taken out and immediately spread on adequate surfaces to dry, preferably under direct, natural sunlight, or using validated drying equipment. If the drying is not started immediately, the cocoa beans will continue fermenting and may rot. Good drying is as important as good fermenting. The beans will only develop the desired brown color inside if they are properly dried. While on the drying bed, the beans must be turned several times each day.

The evaluation should verify procedures and their implementation, as well as assess information (i.e. records) that describes the drying process of the cocoa beans.

### 2.1.5 Machinery usage
**Guidance:**

The Entity should have procedures for controlling and operating machinery within the facility, to ensure appropriate usage. A maintenance plan is required for all machinery that falls under the responsibility of the Entity. Where necessary, pictograms and/or guidelines must be available for each machine and employees must be trained and authorized to use specific machines.

The evaluation should verify procedures and assess information (i.e. records) that describes the operation of machines, and verify correct implementation of procedures within the facility.

### 2.1.6 Cleaning, sorting and packaging process
**Guidance:**

When the beans are completely dried, they must be sorted to remove the flat beans, black beans, moldy beans, small and/or double beans, and beans with insect damage, etc.

Cocoa beans should be packaged in clean jute bags which are sufficiently strong and properly sewn or sealed. The bags must be made of non-toxic materials and have no signs of contamination.

The evaluation should verify procedures along with their implementation and assess information (i.e. records) that describes the cleaning, sorting and packaging of cocoa beans with a visible Cacao-Trace™ logo.

### 2.1.7 Receiving dry cocoa beans
**Guidance:**

The Entity should have procedures to control the receipt of dry cocoa beans, with clear definitions of acceptable and non-acceptable beans.

When auditing the reception zones, the evaluation should verify procedures and their implementation, as well as assess information (i.e. records) that describes the dry cocoa bean receiving process.

### 2.1.8 Storage conditions

**Guidance:**

The bagged cocoa beans must be placed in storage sheds that are weatherproof, well aired, dry, free from insects/pests, and away from smoke and other odors that would contaminate the cocoa. The bags must be kept above ground level and away from walls. The storage areas must be kept locked and clean at all times.

The evaluation should verify procedures along with their implementation and assess information (i.e. records) that describes the storage conditions of the cocoa beans.

### 2.1.9 Shipment control

**Guidance:**

The Entity should have procedures to ensure the appropriate condition of cocoa beans for the whole shipment process (from factory storage to container) in order to avoid any contamination. The container must be clean and odor-free.

The evaluation should verify procedures along with their implementation and assess information (i.e. records) that describes the shipment conditions of the cocoa beans.

### 2.1.10 Fumigation

**Guidance for entities who ship non-organic beans:**

Fumigation is a method of avoiding infestations during shipment of the cocoa bags. The Entity should have procedures to monitor fumigation activity during storage and transportation of the cocoa beans.

The evaluation should verify procedures and assess information (i.e. records and certifications) to ensure appropriate use of chemicals.

### 2.1.11 Cocoa bean grading

**Guidance:**

The grading of cocoa beans differs between countries and regions. Together with Puratos, the Entity will define the grading specifications, following the Cacao-Trace™ dry bean quality grading format and with respect to cocoa trade associations and national authority specifications.

## 2.2   TRACEABILITY MANAGEMENT

### 2.2.1 Data collection
**Guidance:**

Data collection is vital to ensure the Traceability of the product, and implement corrective actions in case of a problem.

The evaluation should assess evidence that there is a system in place to collect data - collector information, farm information, location, production yield, area, age of the farmer and other relevant qualitative information (gender, school etc...)

At the request of Puratos, the Entity is subject to internal audit to ensure that (agricultural) outputs match volumes received by the Entity Physical.

### 2.2.2 Traceability of the Product
**Guidance:**

To certify the cocoa as Cacao-Trace™, Physical Traceability is crucial for us to be able to follow the volume of pods and/or beans all along the supply chain.

The evaluation should assess the evidence of procedures and their implementation to ensure Physical Traceability via Lot number, from the receipt of the pods until the export of the dried cocoa beans.

### 2.2.3 Collectors/ Consolidators
**Guidance:**

Everyone involved in the Cacao-Trace™ supply chain plays an important role and must follow the correct procedures. In some instances, collectors and consolidators are needed in order to connect dispersed growers to the buyer. The evaluation should assess procedures that monitor compliance with the Cacao-Trace™ Standard procedures for: 2.1.1 Receiving raw materials, 2.1.3 The pod breaking process, and 2.2.4 Financial flows.

### 2.2.4 Financial flows
**Guidance:**

All financial transactions must be controlled and registered, in order to monitor the quantity of beans purchased and to prove that farmers are being paid.

The evaluation should assess evidence that demonstrates implementation of a procedure for receiving the pods and/ or beans and payment to the collector and farmers.

# 3. PRINCIPLE 3 – ECONOMIC RESPONSIBILITY

**Purpose:** To ensure responsible pricing for farmers and transparency of information regarding price, quality premium, the Chocolate Bonus program and monitoring of long term impact.

## 3.1 Responsible pricing and purchasing activities
**Guidance:**

To certify the cocoa as Cacao-Trace™, the production and selling of cocoa beans must be economically sustainable for farmers.

Responsible pricing is an important focus of the Cacao-Trace™ Standard. The Entity should be able to justify a clear pricing policy through:

- A clear calculation method
- General Context evaluation (national policy, international price, climatic or political events affecting cocoa)
- Production cost evaluation
- Communication tools to ensure the appropriate transparency of cocoa prices within the supply chain

Optimal responsible pricing should cover the production costs and be profitable for the farmer.

## 3.2 Quality premium policy
**Guidance:**

The quality premium is one differentiator of the Cacao-Trace™ pricing structure, as Puratos aims to reward the production of high quality cocoa beans. The amount of the premium is defined for each country according to the supply chain specificities and the different quality levels. The quality premium should positively impact the Cacao-Trace™ supply chain and gradually help to increase farmers' incomes.

**The evaluation should verify that:**
- ✓ A quality premium, in accordance with the quality of Post-Harvest processes and cocoa bean specifications, is part of the Entity pricing structure
- ✓ The quality premium is effectively increasing the purchasing prices of Cacao-Trace™ beans versus cocoa beans sold on the conventional market.
- ✓ The quality premium fairly benefits the supply chain and the farming communities and, where possible, is traceable to the farm gate.
- ✓ The quality standard and premium should be approved by Puratos.

### 3.3 Chocolate Bonus Program
**Guidance:**

The Chocolate Bonus is a unique Cacao-Trace™ concept supported by Puratos through its Next Generation Cocoa Foundation. Customers who buy Cacao-Trace™ chocolate products directly support the long-term sustainability of the chocolate supply. For every kilo of chocolate purchased, Cacao-Trace™ collects a "Chocolate Bonus" of €0.10 (ten Euro cents) to be paid back to the farming community. Given that the Chocolate Bonus relies on sales of the finished goods, this aspect of the program can take some time to implement. This requirement will only be evaluated once the Chocolate Bonus has been put in place.

The Chocolate Bonus should positively impact the Cacao-Trace™ supply chain and gradually help to increase farmers' incomes and/or living standards.

Chocolate Bonus should be implemented in all Cacao-Trace™ sourcing countries. The amount distributed should be in line with the amount of Chocolate Bonus collected from Cacao-Trace™ product sales.

100% of the Chocolate Bonus collected is redistributed among the first layers of the supply chain at the farming community level, (farmers, collectors, farmer groups, cooperatives) in a fair and transparent way. The guidance on distribution may vary according to each supply chain's specificities (community projects or cash distribution).

**The evaluation should verify that:**
- ✓ The Entity has established adequate local guidance on Chocolate Bonus distribution and this has been approved by Puratos. The local rules of distribution are documented, fair and match the realities of the local supply chain.
- ✓ The Entity distributes the collected Chocolate Bonus to Cacao-Trace™ farmer communities on a yearly basis, in the form of cash and/or projects, according to the defined local guidance.
- ✓ The distribution system is audited yearly by an independent third party paid for by Puratos.

### 3.4 Long term viable management plan
**Guidance:**

The Entity must have a long-term commitment and a viable management plan for the supply chain.

**The evaluation should verify:**
- ✓ A documented annual budget, a business plan and roadmap for the next 5 years, sales contracts for the raw materials and/or semi-finished and/or finished goods.

# 4.    PRINCIPLE 4: SOCIAL RESPONSIBILITY

**Purpose:** To ensure that all levels of the supply chain respect good labor practices and labor laws.

## 4.1    National & International labor laws
**Guidance:**
All levels should comply with local and international laws related to labor.

The evaluation should communicate and promote compliance with the labor laws and assess evidence of compliance and implementation at all levels.

*\*This Requirement is considered as a red flag. Any non-compliance (failure to comply with the law) requires a mandatory Action Plan.*

## 4.2    Trade Unions
**Guidance:**
The right of employees and contractors to form associations and bargain collectively with their employer should be respected.

The evaluation should assess evidence that describes the compliance with all the requirements related to union rights, as per the referenced ILO conventions.

**References:**
- ILO Convention 87 (1948) Freedom of Association and Protection of Right to Organize
- ILO Convention 98 (1949) Right to Organize and Collective Bargaining

## 4.3    No child labor
**Guidance:**
The Entity should clearly define the minimum working age of employees according to international and national regulation and communicate this to all levels of the supply chain.

If working children (under 18 years old) are observed in the Production / Post-Harvest Unit, the evaluation should define if it is **acceptable work for a child, unacceptable child labor or the worst form of child labor**.

- **Acceptable work for a child:** is limited to a few hours a week, supervised by responsible adults, to pass on cultural and farming traditions to the youth generations (socializing work), and consist of light and safe tasks that do not compromise school attendance.
- **Unacceptable child labor**: is defined as underage (below 15) unsupervised work, and/or underage (below 15) with excessive hours, and/or underage (below 15) which compromises school attendance.
- **Worst form of child labor:** hazardous activities (age inappropriate), exploitation or trafficking.

The evaluation should assess evidence that describes the compliance with all the Requirements as per the referenced ILO conventions relating to child labor.

**References:**
- ILO Convention 138 (1973) Minimum Age
- Hazardous tasks are defined as per ILO Convention 182, Article 3

*\*This Requirement is considered as a red flag. Any non-compliance (scoring 0 or 1 on the checklist) results in a mandatory Action Plan to address the issue.*

## 4.4   Access to education
### Guidance:
The Entity should make sure that children living in Production and Post-Harvest Units have access to education, irrespective of their gender.

The evaluation should assess evidence that describes compliance with all the national requirements relating to access to education.

*This Requirement is considered as a red flag. Any non-compliance (scoring 0 or 1 on the checklist) results in a mandatory Action Plan to address the issue.*

## 4.5   No forced labor
### Guidance:
The Entity should not allow any type of slavery, debt bondage, trafficking or other forms of forced labor.

The evaluation should assess evidence that describes compliance with all the Requirements as per the referenced ILO conventions related to forced labor.

### References:
- ILO Convention 29 (1930) Forced Labour
- ILO Convention 105 (1957) Abolition of Forced Labour

*This Requirement is considered as a red flag. Any non-compliance (scoring 0 on the checklist) results in a mandatory Action Plan to address the issue.*

## 4.6   No discrimination
### Guidance:
Positive discrimination to provide employment and benefits to specific communities is acceptable as part of negotiated agreements. However, the Entity should ensure:

- The equality of opportunity and treatment with respect to employment and occupation;
- No discrimination on the basis of race, color, religion, political opinion, nationality or social origin.

The evaluation should assess evidence that describe the compliance with all the requirements as per the referenced ILO conventions related to discrimination.

### References:
- ILO Convention 100 (1951) Equal Remuneration
- ILO Convention 111 (1958) Discrimination (Employment and Occupation)

* This Requirement is considered as a red flag. Any non-compliance (scoring 0 on the checklist) results in a mandatory Action Plan to address the issue.*

## 4.7  Gender equality

**Guidance:**

The Entity has a policy to prevent, monitor and record any gender discrimination, gender violence and or sexual harassment. The Entity should consider matters such as: training on gender equality, especially on women's rights and gender discrimination, as well as counselling for women affected by violence.

The evaluation should assess evidence that describes compliance with all the Requirements as per the referenced ILO conventions relating to women's' rights.

**References:**

• ILO Convention 111 (1958) Discrimination (Employment and Occupation)

*\*This Requirement is considered as a red flag. Any noncompliance (scoring 0 or 1 on the checklist) results in a mandatory Action Plan to address the issue.*

## 4.8  Wage and benefit

**Guidance:**

The Entity should ensure the appropriate wages and benefits for employees, according to local and national laws. The evaluation should assess evidence that describes compliance with local and national laws relating to wages and benefits.

**References:**

• Annexes that define the wages and benefits for employees (different for each country / region)

*This Requirement is considered as a red flag. Any non-compliance (scoring 0 or 1 on the checklist) results in a mandatory Action Plan to address the issue.*

## 4.9  Working hours and overtime work

**Guidance:**

The Entity should ensure the appropriate working hours and overtime work of employees according to local and national laws.

The evaluation should assess evidence that describes compliance with all the local requirements relating to working hours and overtime work.

**References:**

• Annexes that define the working hours and overtime work for employees (different for each country / region).

## 4.10  Disciplinary practices

**Guidance:**

The management must treat all personnel with dignity and respect. The management does not engage in corporal punishment, mental or physical coercion, or verbal abuse of personnel. No harsh or inhumane treatment is allowed.

# 5.   PRINCIPLE 5: HEALTH & SAFETY RESPONSIBILITY

**Purpose:** To ensure safe and healthy production practices and monitor the long-term impact.

## 5.1   Occupational health and safety
**Guidance:**
The Entity should carry out context assessments and adopt preventive and protective measures to ensure health and safety with respect to: workplaces, machinery, equipment, chemicals, tools and processes. The Entity should ensure dissemination of information, appropriate training, supervision and compliance, including special protection for youth and pregnant/breastfeeding women workers and coverage against occupational injuries and disease.

The evaluation should verify the Occupational Health and Safety procedures and assess related documents.

## 5.2   Training of employees
**Guidance:**
All levels should ensure that, through engagement in regular training activities, all of their employees are competent in technical and health and safety knowledge.

The evaluation should verify if the Entity has a monitoring system to evaluate training needs (e.g. a visible need for training or through requests from farmers) and to provide adapted support as per the IMC context assessment.

## 5.3   Basic needs
**Guidance:**
All levels should ensure that all the basic needs of the employees/sub-contractors, such as access to clean drinking water and sanitation facilities, are met. In case laborers live/sleep in company houses, safe and clean accommodation should be provided and this should not be overcrowded.

The evaluation should verify that employees'/sub-contractors' basic needs are being met.

## 5.4   Healthcare program
**Guidance:**
The Entity should ensure that there is at least an annual medical check / healthcare program for the permanent employees. This contributes to supporting the overall working capability of the employees. Basic medical equipment should also be provided for both permanent and temporary the employees.

The evaluation should verify the Healthcare program, along with its implementation, and assess the related documents.

## 5.5   Protective equipment
**Guidance:**
All levels should promote appropriate provision and usage of protective equipment for the employees/sub-contractors. The required protective equipment should be defined for each process, as per the context assessment carried out by the IMC.

# 6.    PRINCIPLE 6 – AGRICULTURAL BEST PRACTICES

**Purpose:** To ensure good practices in cocoa farming (productivity, pest and soil management and plant nutrition), food and farm safety and to monitor adoption of these practices.

## 6.1    Recording of cultivation activities
**Guidance:**

A record-keeping system should be established, either at the farm or Entity level, in which all the essential elements of cocoa production are captured. Records should be kept on the types and sources of planting materials, pruning, as well as the usage and types of pesticides and fertilizers.

## 6.2    Genetic / planting materials
**Guidance:**

Choice of planting materials and rootstocks should be based on national legislation and characteristics such as high productivity, quality of the bean, consumer acceptability, and resistance to pests and diseases.

If the planting material is not consistent with national regulations, it is important that efforts are made to improve it

The evaluation of the use of grafting, replanting, the presence of a nursery and the variety of trees should be based on the context assessment.

## 6.3    Planting density and pattern
**Guidance:**

Cocoa should be planted in the most suitable pattern and density according to the variety and topography, to ensure high productivity and easy management of the farms.

The evaluation should assess the correct distance between trees and the sun penetration as per the context assessment and as defined by the Entity. The assessment will only consider new plantings.

## 6.4    Pruning practice
**Guidance:**

Pruning is the removal of unwanted branches from a cocoa tree. It is an important operation, which can affect yields in both the short and long-term. Insects and diseases multiply more in unpruned cocoa trees with dense canopies, than in trees that have been opened up by pruning and display well-aired canopies. Pruning can also stimulate flowering and pod production. Pruning of shade trees and crops which could impact sunlight to the cocoa trees is also encouraged.

The evaluation should assess the structure of the tree (distribution and height of the branches), sun penetration, as well as if the Entity offers training on pruning.

## 6.5    Soil nutrition management

**Guidance:**

Soil nutrition is the basis of all agricultural production; the conservation and improvement of this valuable resource is essential. Good soil husbandry ensures the long-term fertility of soil, boosts yield and contributes to profitability.

The evaluation should assess records that describe the fertilizing activities and/or composting on the farm, as well as if the Entity offers training on soil nutrition.

## 6.6    Pest control and Integrated Pest Management (IPM) methods

**Guidance:**

There should be procedures for pest control techniques, which provide advice and information on types and frequency of pests (and diseases). Adoption of Integrated Pest Management (IPM) regimes should be encouraged in order to minimize the use of chemicals and promote the use of biological control wherever possible.

The evaluation should assess evidence of training material and or the application of appropriate pest control and IPM procedures displayed at farm level.

## 6.7    Authorized Agrochemical products

**Guidance:**

The Entity and Post-Harvested Unit should ensure that the information on authorized agro-chemical products is communicated to farmers and there is no use of prohibited pesticides during cocoa cultivation activity.

**The evaluation should assess:**

✓  The evidence that describes the control and prevention of using prohibited pesticides.
✓  Whether farmers have a list of authorized products and documented procedures on correct application, as well as demonstrating correct usage.

**References:**

- World Health Organization (Agrochemicals type 1A & 1B)
- FAO International Code of Conduct on the Distribution and Use of Pesticides (1985, Revised 2002)

## 6.8   Handling of Agrochemicals

**Guidance:**

Agrochemical products can be harmful for both farmers and the environment if they are not used properly. Farmers have to implement good practices when handling Agrochemical products and use the necessary equipment correctly.

There should be responsible personnel for handling Agrochemicals and appropriate training (or verification of ability) regarding the handling, mixing, storage and disposal of Agrochemicals should be provided.

The evaluation should assess evidence that describes the training of responsible personnel and the implementation of good practices.

## 6.9   Cocoa harvesting

**Guidance:**

Harvesting can affect seed quality and the sustainability of cocoa production.

The evaluation should assess evidence which describes harvest criteria (how to identify ripe fruit) and how to harvest without damaging the flower pad.

## 6.10  Integrated farming

**Guidance:**

Integrated farming improves the resilience of a farm against climate change, pests and diseases and volatility in the agricultural market.

The Entity should encourage integrated farming, which includes but is not limited to, intercropping, agro-forestry models, closed loop farming, family gardens, animal husbandry, aqua farming etc.

# 7. PRINCIPLE 7 – ENVIRONMENTAL RESPONSIBILITY

**Purpose:** To protect natural resources and biodiversity by managing environmental risk and monitoring long term impact.

## 7.1 Preventing soil erosion
**Guidance:**

Soil erosion can affect the crop yield and the land and water downstream. The Entity should communicate measures to control/minimize soil erosion through training and/or written content. The communication should be relevant to the context assessment carried out by the IMC.

The evaluation should assess records, schedules and content of training to support farmers with cultivation techniques that minimize soil erosion.

## 7.2 Water conservation
**Guidance:**

The Entity should communicate/ offer training on optimizing water use. Notably, within farms with irrigation, efficient irrigation technologies and water management to minimize wastage and avoid leaching to the surrounding environment should be taken into account. The communication should be relevant to the context assessment carried out by the IMC.

The evaluation should assess records, schedules and content of training.

## 7.3 Reduction / recycling
**Guidance:**

The Entity should have measures in place to reduce waste and effluents that occur during cultivation and processing activities. The recycling of waste must be encouraged.

## 7.4   Energy saving

**Guidance:**

The Entity has records of where and how energy is consumed on the facility, throughout their operation activities and immediate supply chain (if the Entity owns the Post-Harvest Unit). Equipment and machinery should be selected and maintained for optimum energy consumption. The use of renewable energy sources and minimization of the use of non-renewable energy sources must be encouraged.

## 7.5   Conservation & restoration plan

**Guidance:**

The Entity should promote good practices in managing the landscape and biodiversity of the surrounding environment. There should be conservation and restoration of natural habitat within the region / country where the cocoa production takes place.

The Entity should encourage the rehabilitation of trees, through communication about the agricultural best practices.

# ANNEXES

Annexes will be provided by countries according to Local Legislations (labor law etc…) and Local Specificity (cocoa specification, etc…).

All the required information can also be centralized in one annex file by the Entity and provided to the Auditor at the time of the audit.

## ANNEX 1: DEFINITION

**Accreditation Body:** Organization that provides oversight to Verification Bodies, by assessing them against international voluntary standards such as ISO/IEC 17021. They may be linked to governments, and have to comply with the International Standard ISO/IEC17011.

**Action plan:** Detailed steps which have been mapped out in order to improve compliance with the Cacao-Trace™ Standard.

**Agro-chemicals:** Various chemical products used in agriculture (e.g. pesticides, herbicides, fungicides, chemical growth agents…)

**Applicant:** Organization, business or cooperative who expresses an interest in being verified as Cacao-Trace™.

**Auditee:** The Organization being audited.

**Auditor:** Person that works for or is contracted to a Verification Body (VB) to perform conformity assessments and surveillance. VBs are responsible for ensuring Auditors meet qualification Requirements.

**Cocoa bean:** Seed of the cocoa tree (Theobroma Cacao) [source: ISO 2451:2014, 3.5]

**Cocoa product:** Product derived from the processing of the cocoa bean, including nibs, cocoa liquor/mass, cocoa butter, cocoa cake and cocoa powder. [source: ISO 34101-3:2018, 3.4]

**Cocoa supply chain:** Sequence of the stages and operations involved in the movement of cocoa beans and processing of cocoa products, from farm to the point of exit from the factory door of the manufacturer of the final retail product. [source: ISO 34101-3:2018, 3.5]

**Compliance:** Fulfilment of a requirement [source: ISO 34101-3:2018, 3.7 modified "conformity" has been replaced by "compliance"]

**Data:** Facts about an objective. [source: ISO 34101-3:2018, 3.9]

**Integrated Pest Management (IPM):** Effective and environmentally sensitive approach to pest management that relies on a combination of common-sense practices. IPM programs use current, comprehensive information on the life cycles of pests and their interaction with the environment. This information, in combination with available pest control methods, is used to manage pest damage by the most economical means, and with the least possible hazard to people, property, and the environment

**Internal Management Committee (IMC):** is responsible for the implementation of the Cacao-Trace™ Standard. Each country should have an IMC. The Entity is responsible for clearly defining who part of the IMC is for the Cacao-Trace™ Standard and what their role is. The IMC is responsible for conducting a context assessment, which identifies the most relevant needs, covering the seven principles.

**Lot:** Set of units of a product which have been produced and/or processed or packaged under similar circumstances. [source: ISO 22005:2007, 3.3]

**Organization:** Person or group of people that has its own functions with responsibilities, authorities and relationships to achieve its objectives in relation to sustainably production of cocoa beans. [source: ISO 34101-3:2018, 3.19]

**Process:** set of interrelated or interacting activities which transforms inputs into outputs. [source: ISO 34101-3:2018, 3.20]

**Producer:** Farmer that cultivates cocoa trees and harvests cocoa pods that are sold to the Entity before or after processing.

**Product:** Output of an Organization that can be produced without any transaction taking place between the Organization and the customer. [source: ISO 34101-3:2018, 3.21]

**Requirement:** Required criteria to be fulfilled according to the Cacao-Trace™ Standard.

**Segregation:** The process that separates conforming from nonconforming Cacao-Trace™ cocoa beans and/or cocoa products but allows mixing of conforming cocoa beans and/or cocoa products from different Organizations. [source: ISO 34101-3:2018, 3.22 modified "cocoa beans" has been substituted by "Cacao-Trace™ cocoa beans"] Segregation principle is required for Cacao-Trace™ beans.

**Sub-contractor:** A supply chain actor contracted by an Entity or a Post-Harvest Unit to carry out specific activities.

**Sustainably Produced Cocoa Beans:** Cocoa beans that are produced in an economically viable, environmentally sound and socially responsible manner, within an Entity. [source: ISO 34101-3:2018, 3.27 modified "Organization has been replaced by "Entity"]

**Traceability System:** totality of data and operations that is capable of maintaining desired information about a product and its components through all or part of its production and/or utilization chain. [source: ISO 34101-3:2018, 3.29]

**Traceability:** ability to follow the physical movement and/or mass conformity of Sustainably Produced Cacao-Trace™ Cocoa Beans through specified stage(s) of production, processing and distribution. [source: ISO 34101-3:2018, 3.28 modified "cocoa beans" has been substituted by "Cacao-Trace™ cocoa beans"]

**Verification Body (VB):** The Organization providing auditing and verification services- so called conformity assessments - demonstrating that specified requirements relating to a product, process or system are fulfilled.

**Verification Letter:** An official documentation issued by a Puratos approved Verification Body, when an Entity complies with the requirements of the Cacao-Trace™ Standard.

# ANNEX 2: WEIGHTED SCORING SYSTEM

Each of the 7 principles is given a weight of 14.28%. The 14.28% is made up of the collective scoring from the 3 levels. A weighting system is applied, giving more or less weight to the scoring of a level depending on the level's responsibility for the principle considered.

| | Rating | Post-Harvest Unit (Puratos or Collectors) | Entity (Puratos and Partners) |
|---|---|---|---|
| **Principle 1 –** Legal Responsibility | 20% | 20% | 60% |
| **Principle 2 –** Quality and Traceability | 0% | 50% | 50% |
| **Principle 3 –** Economic Responsibility | 25% | 25% | 50% |
| **Principle 4 –** Social Responsibility | 25% | 25% | 50% |
| **Principle 5 –** Health and Safety | 25% | 25% | 50% |
| **Principle 6 –** Agricultural Best Practices | 40% | 10% | 50% |
| **Principle 7 –** Environmental Responsibility | 25% | 25% | 50% |