



## Calidena Toolbox

Support material for the Calidena Handbook 2.0



On behalf of



Federal Ministry  
for Economic Cooperation  
and Development

On behalf of the Federal Government of Germany, the Physikalisch-Technische Bundesanstalt promotes the improvement of the framework conditions for economic, social and environmentally friendly action and thus supports the development of quality infrastructure.

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**Readers:** This toolbox is a complement to the Calidena Handbook 2.0<sup>1</sup> and especially geared towards people in charge of programs and projects aimed at developing value chains or quality infrastructure, as well as facilitators of Calidena processes.

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Further information is provided via [www.calidena.org](http://www.calidena.org)

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<sup>1</sup> [https://www.ic.ptb.de/media/fileadmin/Publications/PTB\\_Info\\_Calidena\\_EN.pdf](https://www.ic.ptb.de/media/fileadmin/Publications/PTB_Info_Calidena_EN.pdf)

# Part 1 – Instructions for Use

This toolbox is complementary to the Calidena Handbook 2.0 and differentiates between tools according to the phases of the process:

- Preparatory tools
- Workshop tools
- Follow-up tools
- Training tools

Each tool is presented first in an overview table designed to provide a quick orientation, then followed by a more detailed description and a step-by-step guide to the procedure.

It is not mandatory to use all the tools. Many tools are offered as suggestions, which can be applied according to the specific local requirements. In the synopsis (chapter VI) a clear distinction is made between which tools must be used and which are optional.

The diagram below illustrates the complete process for applying the Calidena methodology. At each stage, the facilitator should select the tools best suited to his or her particular needs.

In the general interest of environmental and climate protection, please consider the extent to which virtual or hybrid elements can be used during application of the Calidena methodology and the tools presented here. This applies in particular to preparation and follow-up meetings, but also to other intermediate steps in the global process. In 2020–2021, an entirely virtual Calidena process took place and the experience gained during this time has been documented. From PTB's point of view, and with the goal of using this tool in mind, a completely virtual process is not recommended and is still only a second-best solution. Nevertheless, well-considered use of virtual elements and formats is explicitly encouraged and recommended to Calidena users for future processes.



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The application of the Calidena methodology should be conducted/accompanied exclusively by facilitators who had previously been trained by PTB trainers. Only by complying with this requirement, proper quality assurance, integration of new experiences as well as knowledge management of lessons learnt can be guaranteed for the purpose of continuous improvement of the methodology through the Calidena Community of Practice. Hence, all readers and users of the Calidena methodology are invited to share their experiences, suggest improvements or send us their questions.

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Figure 1

# Part 2 – Tools for Preparation

## 2a. Value Chain Selection

### 1. Instructions for application

<b>Objective/function</b>	To support the identification and selection of those value chains that are most appropriate for the application of the Calidena methodology
<b>Application</b>	There are usually various possible value chains that can be worked with in any given country. Therefore, this exercise should be done before the kick-off of a specific Calidena process.
<b>Stakeholders involved</b>	Host organization of the initiative, project coordinator and consultant/facilitator
<b>Time required</b>	Gathering information will take several weeks
<b>Context</b>	Information will be collected in the framework of a feasibility study. The actual selection will be made at a short meeting of the decision makers.
<b>Resources</b>	Consultant for field research. Meeting room with panel, markers and dots.
<b>Observations</b>	<p>It is often difficult to identify the “right” value chain through research alone, because the application of the methodology itself will show whether the choice was successful.</p> <p>It is possible to start with two Calidena processes in a country. This helps to compare experiences and catalyze the learning process.</p> <p>An alternative would be a competitive selection process, in which interested host organizations present themselves as candidates for the application of the methodology. This makes particular sense in the context of regional projects.</p>

### 2. Description

To select a value chain, apply the usual procedures, see i.e. <https://www.marketlinks.org/good-practice-center/value-chain-wiki/value-chain-selection>

As Calidena has a specific focus on quality, it should be applied to VCs that are already articulated and where more general support is guaranteed (i.a. by another development agency).

### 3. Selection

A matrix for a comparative assessment of different value chains can be used to select a value chain. Annex 1 presents an exemplary value chain selection matrix that applies the following selection criteria:

- GIZ-supported value chains
- Synergies with the GIZ project during implementation
- Economic relevance
- Prevalence of quality issues
- Existence of basic QI
- Relative simplicity of the VC
- Linkages with other PTB project components
- Awareness of the need for quality improvement
- Motivation of VC actors to dedicate time and resources
- Mutual willingness of QI and VC actors to interact

The above-listed criteria can be partially replaced or supplemented by other criteria. If the Calidena exercise is conducted in cooperation with a GIZ project, the previous GIZ selection of value chains implicitly includes a variety of socio-economic selection criteria which do not necessarily need to be considered again in the PTB selection process. This typically includes criteria such as ease of market access, market demand, export potential, density of SMEs or potential involvement of low-income households.

The scoring assessment should be carried out in a participatory way by knowledgeable representatives of PTB, GIZ, counterpart institutions and other relevant organisations. According to this assessment, one, two or a maximum of three value chains usually score highest and are thus the most suitable – from a quality improvement perspective – for analysis and support through a Calidena process.

## 4. Procedure

### Steps:

1. Obtaining agreement from host organization about the selection criteria (see handbook)
2. Compiling a long list of possible candidates
3. Applying the selection matrix – prioritization of VCs

Below is an example of the assessment based on the process for selecting value chains in one country:

Products/criteria	Wood pieces and parts	Food packaging	Polyvinyl chloride (PVC) piping	Non-alcoholic beverages
Real opportunities to export to Europe	2	1	1	2
Experience and advances in chaining	2	1	2	1
Diverse quality services required	2	2	3	2
Participation of SMEs in the chain	3	1	1	2
Conscious need for quality improvement	3	3	3	3
Motivation of stakeholders for dedicating time and resources	3	1	1	2
<b>Total</b>	<b>15</b>	<b>9</b>	<b>11</b>	<b>12</b>

For selection, we suggest applying the criteria in a matrix to evaluate those interested in carrying out a Calidena project (representatives from manufacturers, processors and traders' associations, representatives from bodies supporting exports, representatives from cooperation programs and representatives from the quality system). Each criterion is scored from 0 to 3 (0 = not applicable, 1 = applies to some extent, 2 = applies in general, 3 = good conditions).

In this case, scoring fifteen (15) points leads to the selection of this chain.

# 2b. Communication Guide

## 1. Instructions for application

<b>Objective/function</b>	During the preparation of the workshop, the Calidena facilitator must make one or two prior visits to the country. The functions of these visits are as follows: <ul style="list-style-type: none"> <li>■ To provide authorities, QI bodies and representatives of the business sector with information on the Calidena approach</li> <li>■ To identify and select chains and/or products suited to the application of the methodology</li> <li>■ To identify the host</li> <li>■ To prepare the invitation and the first Calidena workshop</li> </ul>
<b>Application</b>	In the preparation phase of the Calidena workshops
<b>Stakeholders involved</b>	Representatives of the host organizations, a Calidena facilitator
<b>Time required</b>	The duration of the visits depends on the needs identified. The prior visits by the facilitator to the country must last at least 3 days to enable visits to factories, laboratories, etc.
<b>Context</b>	Direct communication between the Calidena facilitator, the host of the initiative and the follow-up committee
<b>Resources</b>	The use of various means of long-distance communication is recommended. The advantages and disadvantages of each one is described in the table below.
<b>Observations</b>	<p>The success of a Calidena initiative depends largely on the preparation. Those responsible for a Calidena project are the Calidena facilitator in charge and, later, the host of the initiative. During the preparation, we recommend that the Calidena facilitator visits the country once or twice prior to the first workshop.</p> <p>The visits by the Calidena facilitator must also be prepared and require long-distance follow-up as well.</p>

## 2. Distance guidance

Long-distance communication requires proper organization for it to be effective and efficient. It is important for the Calidena facilitator to test different channels of communication and encourage local counterparts to make use of them, including new platforms. The advantages and limitations of the different channels are summarized in the table below:

In practice, the key lies in making intelligent use of various means of communication. The precondition is that the Calidena facilitators must exchange all contact details

at the beginning of the Calidena project preparation and encourage their counterparts to join various platforms.

As in physical meetings, it is convenient to have an agenda for each virtual encounter and agree on a work plan (in writing), especially for the steps involved in preparing the Calidena exercise. The Calidena Handbook, the webpage [www.calidena.org](http://www.calidena.org)<sup>1</sup> and the other tools and resources must be used by the Calidena facilitator to speed up the process and empower local counterparts.

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<sup>1</sup> The website is currently under construction and will be hosted at another platform. An announcement on the newly established website will be provided via <https://candela-ptb.de>

### 3. Advantages and disadvantages of different means of communication

Platform	Advantages	Limitations
Telephone (landline)	Traditional means of long-distance communication	Necessitates being in the office, does not provide visual support
Mobile phone	It is possible to talk from outside the office, enables SMS messages to be sent	Requires a device, expensive, does not provide visual support
E-mail	Most common means of communication, widespread use	No good for immediate communication, responses often take time to arrive
Open teleconference software (i.e. Skype)	Easy to install, widely disseminated, allows calls to be made to landlines and mobiles (skype.out), economical for international calls	Limited functions in a web conference
Video conferencing (i.e. Webex, GoTo, etc.)	Convenient, with multiple functions that facilitate communication	Often requires a licence and setup by a licence owner. Not useful, therefore, for spontaneous interactions.

## 2c. Double Client Check

### 1. Instructions for application

<b>Objective/function</b>	To check whether a pre-selected chain is already using quality infrastructure services before carrying out a Calidena exercise on that chain.
<b>Application</b>	At prior meetings with the stakeholders in the chain, both from the QI and the business sector.
<b>Stakeholders involved</b>	Representatives from the National Metrology Institute (NMI), the Standardization Body and Accreditation Body, companies in the chain. Facilitation is carried out by a Calidena facilitator.
<b>Time required</b>	120 minutes
<b>Context</b>	The space required depends on the number of participants. It must be adequate to allow participants to move around comfortably.
<b>Resources</b>	Board, cards, markers
<b>Observations</b>	We know that the most competitive sectors in developing countries tend to purchase many QI services abroad. International clients often even request certification issued by a body accredited in their country of origin. It is important for the country's QI to also be familiar with its competitors to enable it to create a competitive offer. In this case, the source of information should be the companies in a sector or chain.

## 2. Description

The participants are asked about the users of their services within the pre-identified chain. The guiding questions used are the following, as applied to the textile/clothing industry chain:

<b>Guiding questions to identify the clients of the QI</b>		
QI body	Direct clients	Clients' clients
Metrology	Which companies from the textile and clothing industry sector calibrate their equipment with the National Metrology Institute (NMI)?	Which secondary laboratories calibrate the equipment of companies from the textile and clothing industry sector? What are the names of the clients?
Metrology	Which secondary laboratories require calibration by the NMI to provide services to companies from the textile and clothing industry? What are the names of these secondary clients of the NMI?	Which companies from the textile and clothing industry sector calibrate their equipment with secondary laboratories or with the National Metrology Institute (NMI)?
Standardization/ Certification	What are the national standards relating to the textile and clothing industry sector? Who participates in the Standards Committees? Which institutions are they from?	Which certification companies provide services to the textile and clothing industry sector? Which companies from the textile and clothing industry sector use certifications of products and processes?
Accreditation	Which accredited certification bodies, laboratories and inspection bodies work with the textile and clothing industry sector?	Who are the clients of the certification bodies, laboratories and inspection bodies in the textile and clothing industry sector?



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The business people and service providers are then asked about their providers of quality services and the use of standards/certifications, using the questions in the table below.

Services	Service Provider	Reason for using a service from abroad* (where relevant)
Use of standards	Which technical standards and regulations are applied? Where do you obtain the texts for the standards? Do you participate in standards committees? Are you familiar with the technical regulations? Have you been invited to participate in their creation?	
Certifications	Which certifications do your clients ask for? What are the names of the bodies that issue the certifications?	
Calibration of equipment	Where and by whom do you get your equipment calibrated?	
Testing laboratories	Which tests do you send out to external laboratories? Which external laboratories are they?	

\* Reasons: (a) I couldn't find the service within the country, (b) my client requests it (does not accept the local service), (c) the international service is of better quality or more widely recognized, (d) the international service is cheaper, (e) the domestic laboratories are not accredited and therefore not internationally recognized, (d) other.

The collated information obtained from the QI bodies and the business sector on the use of QI services provides useful data about current use and the potential for working together on a Calidena exercise.

The ideal situation is one in which several businesses from the chain in question already use some services provided by the national QI. These companies may be involved in the preparation of the Calidena exercise. They can provide the names of other companies in the chain, their suppliers and their clients.

### 3. Procedure

#### Steps:

1. Identifying the clients of the QI and their clients in the selected chain (write their names on cards and group them together at the top of the boards according to their organizational affiliation – Metrology, Accreditation, Standardization/Certification)
2. Identifying which services are sought after and used: Standardization/Certification, Calibration of equipment, Testing
3. Collating the information, discussing the usefulness of a Calidena exercise.
4. Deciding whether to carry out a Calidena exercise.



# 2d. Stakeholder Mapping

## 1. Instructions for application

<b>Objective/function</b>	To identify and introduce the key stakeholders that are relevant for the initiative and the relations between them
<b>Application</b>	At the beginning of the initiative, to clarify the institutions and people that need to be involved. It can also be done during the workshop or in another situation where more clarity about the stakeholder constellation is required.
<b>Stakeholders involved</b>	Small group made up of host organization and/or stakeholders themselves
<b>Time required</b>	45 minutes
<b>Context</b>	The exercise is best done in smaller groups with approximately six members
<b>Resources</b>	Panel, cards, markers and a ball of yarn (to indicate the relations)
<b>Observations</b>	The mapping is a good starting point for an initiative and could be revisited in different phases

## 2. Description

### Example:

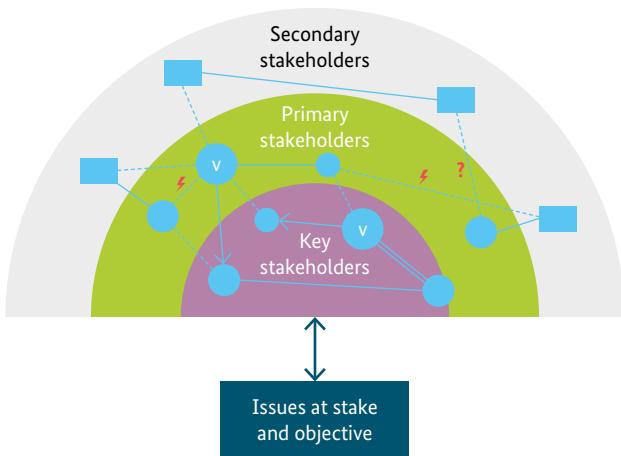


Figure 2. Source: GIZ, Capacity Works

## 3. Procedure

### Steps:

1. Identifying key stakeholders
2. Selecting visualization template (i.e. rainbow, onion)
3. Selecting graphic representation of different stakeholders (i.e. key stakeholder, veto player)
4. Drawing interrelations (i.e. intensity of collaboration, conflict)

# 2e. Prior Mapping of the Chain

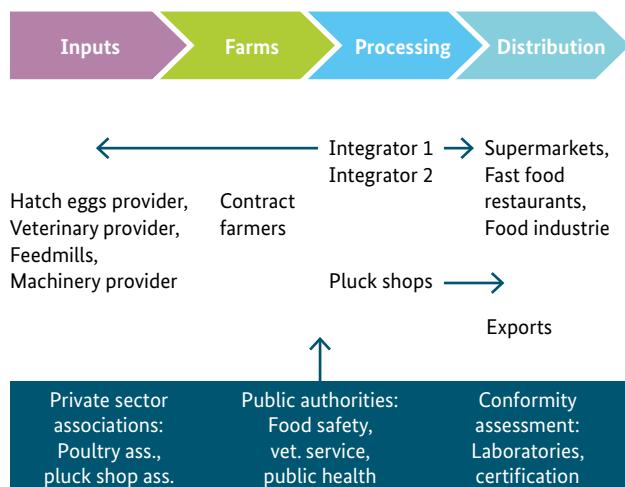
## 1. Instructions for application

<b>Objective/function</b>	The results serve to generate prior knowledge of the chain to help decide how to work with it and to identify possible participants for the Calidena workshop
<b>Application</b>	In prior meetings with the stakeholders in the chain, from both private enterprise and the QI
<b>Stakeholders involved</b>	Business people and manufacturers from the different links in the chain. Facilitation is provided by a Calidena facilitator.
<b>Time required</b>	120 minutes
<b>Context</b>	The space required depends on the number of participants. It must be adequate to allow participants to move around comfortably.
<b>Resources</b>	Board, cards, markers
<b>Observations</b>	To first identify the business stakeholders in a value chain and investigate their demand for QI services, it is important to hold a prior workshop with them and carry out a mapping. The participants must represent all the links in the value chain.

## 2. Description

The participants are grouped together in their respective links, which are marked out on the floor with masking tape. A board is also prepared for each link. Participants are then asked about their demand for services. The results are displayed on the boards using cards.

### Example: Poultry VC Map



## 3. Procedure

### Steps:

- Identifying the end buyers of the selected chain (write their names on cards, group them together on the boards)
- Pinpointing the main requirements of the principal buyers
- Identifying the main links in the chain by starting with the buyers and working backwards through the chain
- Naming companies' representative of each link identified (write their names on cards and attach them to the corresponding link)
- Identifying hot topics related to conformity assessment (write them on cards and stick them in the appropriate place on the diagram of the chain)

Figure 3. Source: Own elaboration

# 2f. Preliminary Field Trip

## 1. Instructions for application

<b>Objective/function</b>	To find out the reality of the businesses in the chain and convince the main stakeholders to participate in or even lead the Calidena project. To elaborate or verify a hypothesis about the Calidena work.
<b>Application</b>	At prior meetings with stakeholders in the chain, from both the private sector and the QI
<b>Stakeholders involved</b>	Representatives of the host institution, the QI and a Calidena facilitator
<b>Time required</b>	One or two days
<b>Context</b>	The field trip must be organized in advance and the rules for the visit also established (Is it permitted to take photos? Are competitors allowed to participate in the visit? etc.)
<b>Resources</b>	-
<b>Observations</b>	<p>Many business owners or managers tend to be a little sceptical at first, particularly about conformity assessment bodies and other companies, including their competitors from the same chain, wanting to visit their premises. Therefore, it is very important to spend sufficient time on this task and persuade them of the usefulness of their collaboration.</p> <p>Arguments for them opening their premises to outsiders are:</p> <ul style="list-style-type: none"> <li>■ To show suppliers and clients the company's high level of quality management (we usually visit leading companies)</li> <li>■ To obtain feedback from experts on topics like metrology and quality management</li> <li>■ To establish contact with authorities that may be of use for various purposes</li> <li>■ To receive information on the possibilities of support through cooperation projects</li> </ul>

## 2. Description

Once the necessary preparations have been made, the Calidena facilitator, along with representatives of the QI and the host institution, will visit the company/companies in a Calidena link. If there are various links, it may be useful to identify companies to visit in more than one link. During the preliminary visit we recommend taking photos that can serve to illustrate the letter or leaflet of invitation to the Calidena workshop.

## 3. Procedure

### Steps:

1. Prior preparation of the visit on the part of the QI
2. As part of the preparation, interviews are arranged with business people from the company/companies
3. Visits are made to the company/companies and interviews are carried out with the business owners and/or their employees

# 2g. Management of Expectations

## 1. Instructions for application

<b>Objective/function</b>	To analyze the relation between benefits/opportunities and costs/risks by using the interaction matrix in the prior meetings with stakeholders in the chain, from both the private sector and the QI.
<b>Application</b>	At prior meetings with stakeholders in the chain, from both the private sector and the QI
<b>Stakeholders involved</b>	Business people and manufacturers from the different links in the chain, representatives of the QI. Facilitation is carried out by a Calidena facilitator.
<b>Time required</b>	120 minutes
<b>Context</b>	The space required depends on the number of participants. It must be adequate to allow participants to move around comfortably.
<b>Resources</b>	Board, cards, markers
<b>Observations</b>	It is recommended that the two groups (QI and business owners) do the exercises separately. Later they can get together and compare results.

## 2. Description

Participating in a Calidena initiative is outside of the everyday experience of the public and private sectors. QI bodies tend to have contact with companies in specific circumstances, for example when they calibrate equipment, participate in a standards creation committee or contract a laboratory to carry out a test. At the same time, many companies know their direct suppliers and clients but are unfamiliar with the stakeholders from other links in the same chain. Therefore, bringing them together with other companies and QI bodies requires some explanation.

We regard participation in a Calidena exercise as an investment. Both the QI bodies and businesses in the chain must release staff for them to participate. In the case of an organization that takes on the role of host, the personnel costs and other costs tend to be even higher. Consequently, it is important to clarify as much as possible the potential benefits and costs/risks of participating in a Calidena exercise.



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Each party analyzes the benefits and costs of their participation by noting down the main points on cards. They then put themselves in the other party's shoes (for example a business owner puts him or herself in the situation of a QI body, and vice versa) by analyzing what the benefits and costs would be for them. The chart below summarizes the possible results of the exercise:

	<b>Benefits/opportunities</b>	<b>Costs/risks</b>
<b>Business in a chain</b>	<ul style="list-style-type: none"> <li>■ Information on the benefits of using the QI</li> <li>■ Discovery of new business opportunities in demanding markets</li> <li>■ Better knowledge of service providers and regulatory bodies</li> <li>■ Better knowledge of other stakeholders in the chain</li> <li>■ Opportunities for collective action</li> </ul>	<ul style="list-style-type: none"> <li>■ Time needed to participate in the workshop and follow-up</li> <li>■ Costs of implementing quality management systems</li> <li>■ Risk of being controlled by authorities</li> <li>■ Risk of competitors finding out company secrets</li> </ul>
<b>QI bodies</b>	<ul style="list-style-type: none"> <li>■ Better knowledge of demand</li> <li>■ Input for adjusting services to actual demand</li> <li>■ Possibility of obtaining new clients</li> <li>■ Increase in sale of services</li> </ul>	<ul style="list-style-type: none"> <li>■ Time needed to participate in the workshop and follow-up</li> <li>■ Chain does not require QI services</li> <li>■ Need to change content and form of service delivery</li> <li>■ Generating expectations that cannot be fulfilled ("disappointment")</li> </ul>

Although the example includes most of the relevant aspects, we nevertheless recommend that interested stakeholders carry out this kind of analysis to evaluate the arguments for and against their possible involvement.

### 3. Procedure

#### Steps:

1. The business owners and QI representatives write down on cards what for them are the opportunities/benefits and costs/risks that might be involved in their participation in a Calidena exercise, and these are placed in the pre-prepared table on the board
2. The participants then switch roles (business owners – QI representatives) and repeat the procedure
3. The results displayed are then discussed until agreement is reached
4. To provide participants with a better understanding of the Calidena workshop results, they are given an explanation of the selection criteria for action proposals within the Calidena workshop, as detailed in the Calidena Handbook (p 28.) to increase their motivation to participate:
  - Implementable with available resources
  - Implementable immediately
  - Visible results in the short term

# 2h. Learning from Buyers

## 1. Instructions for application

<b>Objective/function</b>	To find out the actual demand for product quality on the part of major buyers and incorporate it into the Calidena exercise
<b>Application</b>	Conducting a prior interview with a buyer's representative (see guiding questions below). This interview can also be carried out over the phone or via Skype (N.B. Pamela software allows the call to be recorded).
<b>Stakeholders involved</b>	Calidena facilitator with representatives of the identified companies.
<b>Time required</b>	Dependent on the availability of the business people
<b>Context</b>	If it is not possible for the buyer to participate in the Calidena workshop, an attempt is made to carry out interviews to obtain information about their quality requirements
<b>Resources</b>	Skype, WebEx, GoTo, etc.
<b>Observations</b>	<p>In Calidena we emphasize the fact that it is buyers that define what quality is and set the corresponding requirements. However, getting a buyer's representative to participate in a Calidena workshop is one of the most difficult tasks. Reasons for not participating may include:</p> <ul style="list-style-type: none"> <li>■ Distance: The buyer is in a far-off country and does not often visit the country that supplies products</li> <li>■ Lack of interest in local QI: Many big companies already have their own established systems of conformity assessment and do not use local QI services</li> <li>■ Lack of practice: A Calidena exercise requires a certain openness and collaborative attitude, which are not common in many companies</li> <li>■ Fear of orders: Participating in a Calidena exercise increases the company's visibility and may generate demand for products that the company is unable to meet. A large buyer might then offer its support to help overcome these deficiencies.</li> </ul> <p>What strategies can be used to overcome such obstacles?</p> <ul style="list-style-type: none"> <li>■ Finding buyers' representatives within the country or taking advantage of visits by buyers to the country to organize the Calidena workshop</li> <li>■ Presenting arguments about how the use of the local QI could reduce the costs of certification and conformity assessment.</li> <li>■ Managing the buyer's expectations satisfactorily</li> </ul>

## 2. Description

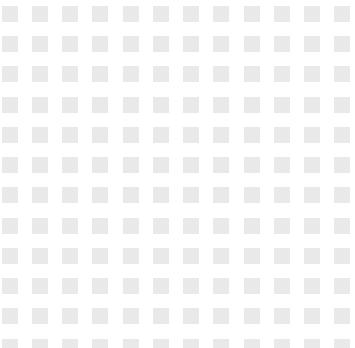
The respective interviews are carried out as described using the guiding questions presented below.

An alternative might be to download a video or other information available on the Internet that explains the production process and quality requirements. For example, a lot of information can be found on YouTube. (See Tool T 1).

## 3. Procedure

### Steps (guiding questions for the interview):

- What requirements do your suppliers need to meet?
- What certification, laboratory tests, etc. do you ask of your suppliers?
- How do you assess compliance with such requirements on the part of suppliers from country XY?
- Do you use metrology or certification services or laboratories in country XY? How do you assess the quality of those services?
- Are you interested in the improvement of QI services in country XY? What would your suggestions be in that regard?
- Is there anything else you would like to add?



# 2i. Feasibility Study

## 1. Instructions for application

<b>Objective/function</b>	Feasibility study
<b>Application</b>	Before sending out invitations to a broad stakeholder workshop a feasibility study should be conducted. The feasibility study is a detailed analysis of the value chain, its stakeholders and the needs and opportunities for quality improvement and quality services.
<b>Stakeholders involved</b>	The feasibility study is conducted by a trained Calidena facilitator
<b>Time required</b>	Gathering information will take several weeks
<b>Context</b>	Information will be collected in the framework of a feasibility study. The actual decision will be made in a short meeting of the decision makers.
<b>Resources</b>	Consultant for field research. Meeting room with panel, markers and dots.
<b>Observations</b>	<p>Often it is difficult to identify the “right” value chain by research alone, because the application of the methodology itself will show whether the choice was successful.</p> <p>It is possible to start with two Calidena processes in a country. This helps to compare experiences and catalyze the learning process.</p> <p>An alternative would be a competitive selection process, in which interested host organizations present themselves as candidates for the application of the methodology. This makes sense in the context of regional projects in particular.</p>

## 2. Description

Within the Calidena methodology, it is a good practice before planning a complete process – including a participatory workshop and the elaboration and implementation of an action plan – to conduct a feasibility study for a proposed value chain and its supporting quality infrastructure.

The main objective of the feasibility study is to support decision-making about whether to continue the process or not. The author of the study – a trained Calidena facilitator – must therefore analyze the potential outcome and impact of the proposed initiative. It is also essential to verify the expectations and commitment of the stakeholders involved and to evaluate possible uncertainties and risks.

The decision itself of whether to continue or conclude the process will be taken by the hosts (i.e. National QI bodies, representative business organization of the value chain) and promoters (i.e. development cooperation agency, national ministry or program). The feasibility study is aimed primarily at the decision makers.

The document should be written concisely (not more than 10 pages!) to facilitate reading by the decision makers.

Nevertheless, the information from the feasibility study could later be disseminated and shared with other stakeholders in preparation for the workshop. When the decision is taken not to continue with the Calidena process, the feasibility study could be used as input for a report about the value chain and the related quality infrastructure to inform a broader public. Delivering this product could provide a graceful exit strategy.

The following topics should be addressed in a clear and comprehensive manner:

#### **0. Key information (cover page)**

- Country, value chain, author(s), delivery date

#### **1. Introduction (1/2 page)**

- Context of the project
- Objective(s) of feasibility study
- Research methodology and process

#### **2. Analysis of the Value Chain (3–4 pages)**

- Economic structure and relevance of VC for national economy; highlight exports
- Map of the value chain
- Buyer requirements

#### **3. Analysis of the Quality Infrastructure (related to the value chain) (2–3 pages)**

- QI and Conformity assessment bodies and their services
- Inventory of standards and technical regulations
- Main gaps in the NQI and opportunities for further development

#### **4. Interaction and impact analysis (1–2 pages)**

- Interaction Matrix – expectations and commitment of hosts and stakeholders
- Expected outcomes and impacts

#### **5. Conclusions and recommendations (1 page)**

- Are value chain stakeholders and QI representatives sufficiently committed to ensure that relevant outcomes and impacts can be expected?
- What are the major challenges and risks?
- What are the key success factors for the further process?
- What are the implications of continuing/concluding the process?
- Is there any other aspect/particularity/etc. of the value chain, QI or this study that should be mentioned here?

#### **What is important to do**

- Talk to people in person and visit them in their working environment (as far as is practical)
- Establish contact with buyers
- Stick to quality-relevant details only
- Take into account all links in the value chain
- Identify relevant markets
- Triangulate information
- Question your own beliefs
- Describe (and support) hypothesis about possible results and impacts

#### **What should be avoided**

- Don't just rely on your beliefs
- Don't try to analyze everything related to the value chain
- Don't only do desk research
- Never start announcing and planning the workshop before approval of the feasibility study

### 3. Procedure

The Calidena feasibility study must be conducted by a trained Calidena facilitator. It is possible for the facilitator to complete the Calidena facilitator training just a few weeks or months before the feasibility study begins, but in that case supervision of the full process by a more experienced Calidena facilitator is required.

The following procedure is recommended:

Duration	Activity	Person in charge
Up to two months	Preselection of one or more value chains to be analyzed in the feasibility study	Project coordinator and partner organization
Up to one month	Training and selection of Calidena facilitators to conduct the feasibility study	Project coordinator and partner organization
Up to one week	Drafting of terms of reference	Project coordinator with support from experienced Calidena facilitator
Up to three weeks	Contracting Calidena facilitator to conduct the feasibility study	Project coordinator
Up to two weeks	Elaboration and approval of work plan	Calidena facilitator and project coordinator
Up to three weeks	Desk research and fieldwork (interviews and mini-workshops)	Calidena facilitator
Up to one week	Writing up the feasibility study report	Calidena facilitator
Up to two weeks	Feedback and revision of report	Project coordinator, project partners and experts/Calidena facilitator
Up to one week	Presentation of feasibility study and recommendations	Calidena facilitator
Up to two weeks	Decision on whether to continue or conclude the process	Project coordinator, partner organization and another host organization

# 2j. Calculating Times and Costs

## 1. Instructions for application

The table of participation by the different stakeholders involved in the preparation and implementation of a Calidena workshop shows the subtotals for each phase and the total time that must be invested.

Days of participation	QI/host	PTB*	Calidena facilitators
Preparation	Number of days		
Calidena training	9	2	10
Feasibility study	5	2	12
Selection of participants	2	0	1
Invitation	2	0	0
Logistical organization	2	1	0
Subtotal	20	5	23
Workshop			
Preparation and facilitation	0	6	6
Organization and logistics	6	0	2
Documentation	2	1	1
Subtotal	8	7	9
Follow-up			
Reflection meeting with QI on workshop results	1	0	1
Follow-up committee meetings	6	2	2
Follow-up via Skype/WebEx, GoTo, etc.	3	3	3
Follow-up workshop	2	0	2
Subtotal	12	5	8
<b>Grand total</b>	<b>40</b>	<b>17</b>	<b>40</b>

\* Project coordinator (based in Germany) or intermittent expert (iSTE)

The Calidena training is especially required when the methodology is introduced to a new country or region.

The table on page 23 represents the share in % that each stakeholder has to contribute in terms of different resources for the preparation and implementation of a Calidena process. The exact number will of course vary according to the specific context of the value chain and is thus an approximation based on previous experiences.

On this basis, the PTB calculates a maximum of US \$50 per day per participant for a Calidena workshop. This cost includes the event room, food and materials. The costs per participants for a Calidena training are similar to the costs of the workshop.

The costs per participants for a Calidena training are similar to the costs of the workshop.

	<b>QI/host</b>	<b>PTB</b>	<b>Calidena facilitators</b>
	Relation of resources to be invested by each party in %	Relation in %	Relation in %
<b>Preparation</b>			
Awareness-raising workshop with QI and chain, field trip	50	20	30
Refreshments for two workshops, 15 persons each	100		
Lunches	100		
Selection of participants	75		25
Invitation	100		
Follow-up to invitation	100		
Logistical organization	75	25	
<b>Workshop</b>			
Preparation and facilitation	15	15	70
Logistical preparation	80	20	
Logistical guidance	60	40	
Accommodation facilitators		100	
Transport participants	50	50	
Accommodation participants (3 days)	50	50	
Lunches (3 days)	100		
Refreshments (3 days)	100		
Final presentation and toast	80	20	
Process documentation	50		50
Workshop materials (cards etc.)	50	25	25
Creation and revision of documentation	50	25	25
<b>Follow-up</b>			
Follow-up committee meetings	70	10	20
Follow-up via Skype, WebEx, GoTo, etc.	50	15	35
Follow-up workshop(s)	60	20	40
Accommodation facilitators (2 days)	100		
Transport participants	100		
Accommodation participants (2 days)	50		
Lunch (1 day)	100		
Refreshments (1 day)	100		

# Part 3 – Tools for the Workshop

## 3a. Living Value Chain

### 1. Instructions for application

<b>Objective/function</b>	To facilitate understanding of the value chain logic through corporal experience
<b>Application</b>	During the Calidena workshop, to explain the value chain
<b>Stakeholders involved</b>	Facilitator and workshop participants
<b>Time required</b>	15 minutes
<b>Context</b>	Spacious venue
<b>Resources</b>	Just a flipchart to capture learning
<b>Observations</b>	<p>It is important to ask the participants about their experience before giving explanations.</p> <p>After the exercise, the facilitator can present the story “It’s the cow’s fault” (see annex).</p>

### 2. Description

An interactive energizer.

This is a good way to create a group spirit and involve all participants.

This exercise enables participants to grasp for themselves the dynamics of the chain: it should be *pulled* from the end customer and must not be *pushed* forward from the production of raw materials. The discussion is then taken to a more abstract level and the topic of quality is introduced. The responses are written down on cards, which are pinned up on a board.

### 3. Procedure

One exercise that can be used in the context of value chains is “the chain”, based on the participants’ age, number of children or height etc. The facilitator asks them to form a chain according to one of the criteria and the participants position themselves according to their characteristics.

When everyone is in place, the participants are asked to hold hands and *push* the chain in one direction. This will probably be impossible, and the chain will break up and become distorted. Next, they are instructed to *pull* the chain in one direction, which will likely work.

Key messages:

- The value chain approach begins with clients’ requirements and analyzes the interrelationship back along the chain (in contrast to “production chains”)
- The competitiveness of a company does not depend on it alone, but on the interrelationship with its suppliers and customers
- It also requires an adequate regulatory framework and supporting institutions that provide the services required by the companies in the chain
- Quality problems that appear in a chain often originate from actions in the links at the beginning of the chain



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# 3b. Participation of Buyers

## 1. Instructions for application

<b>Objective/function</b>	To highlight the important presence of the PTB at the inauguration of the Calidena workshop through the virtual presence of a PTB project coordinator and to enrich the proceedings through the virtual presence of a major buyer of the chain's products
<b>Application</b>	Incorporating the project coordinator from PTB headquarters into the inauguration of the Calidena workshop via Skype/WebEx, GoTo, etc. Enabling the participation of a major buyer when analyzing clients' requirements.
<b>Stakeholders involved</b>	The PTB project coordinator in Germany; representatives of a major buyer at the workshop
<b>Time required</b>	10–20 minutes in the case of the PTB; up to 45 minutes in the case of the buyer, in order to enable questions from the workshop participants
<b>Context</b>	Within the framework of the workshop, at the inauguration and when analyzing clients' requirements
<b>Resources</b>	Skype/WebEx, GoTo, Data Show
<b>Observations</b>	This requires prior coordination and precise synchronization with the local time zone as well as testing of the connection and projection before the actual event so that any necessary adjustments can be made.

## 2. Description

The PTB and buyer's representatives are incorporated at the corresponding times and their images projected on to the big screen in the workshop room.

the QI in the country, which is usually given by a representative of the QI.

## 3. Alternatives

The PTB has prepared a short film entitled "Quality infrastructure in almost 5 minutes" on the need for a QI and how it functions in the context of globalization. This film can be downloaded from the PTB's external internet page (<https://www.ptb.de/cms/en/ptb/fachabteilungen/abt9/fb-93/videos.html>) and shown during the workshop after having finished the explanation of the concept of value chains and the brainstorming activity on the shared understanding of the concept of quality. Watching the film increases the participants' motivation to focus on the topic and also serves as a preparation for the following sessions on the demands of different clients and the introduction to

As it is not so easy to find a client willing to give up the time to participate in person or virtually, there are other options for virtual contact. During the preparation of the Calidena workshop, research should be carried out on Youtube, for example, to find films detailing the requirements of the end client. This type of film can be shown at various points in the workshop.

One such moment would be after having explained the value chain diagram. Another might be after having identified the various standards and technical regulations that apply to the product. Using these media tools makes the workshop more real and enables a clearer and more motivational understanding of the demands of clients and markets.

# 3c. Value Chain Mapping

## 1. Instructions for application

<b>Objective/function</b>	To visualize the participatory analysis of the value chain
<b>Application</b>	Within the workshop
<b>Stakeholders involved</b>	Participants of the workshop
<b>Time required</b>	Approximately 8 hours (for details see workshop schedule in annex)
<b>Context</b>	Small group work. One group for each link.
<b>Resources</b>	4 panels, markers and cards
<b>Observations</b>	This exercise is sequenced into different steps (for details see workshop schedule in annex)

## 2. Description

The value chain mapping is the central activity of a Calidena workshop. This mapping helps participants to share their understanding of the different elements and possible gaps within the value chain analyzed.

You need at least three panels with the headings like farming, processing and distribution. Each heading represents a link in the value chain.

First, for each heading/link in the value chain the participants identify up to seven key activities. For each activity they write a separate card. The aim here is to understand the different steps involved in the processing and physical conversion of inputs during the process.

After that, for each activity, the participants then identify the specific requirements for standards and technical regulations. For each requirement they use a separate card. Here we differentiate between different types of markets, i.e. the national market, export markets and buyer specific requirements.

The analysis continues with the identification of the conformity assessment services required within each link. Often, certification, testing or inspection services relate to various activities, and even involve different links. Again, the participants write for each service a separate card. If the same service applies to different links, they must write the card several times.

The last step in this mapping is the gap analysis. Here the participants compare the services required by selected target markets with the availability of services in the country analyzed. In the Calidena methodology, we also call these gaps “hot topics”. For each “hot topic” they write a card. The prioritization of gaps leads at a later stage to the action plan.

The information gathered through internet research (see 3g, p.34) and the field work is processed by completing the corresponding cards for each activity. Quality requirements are then applied and their importance for each activity is reviewed. The guiding question for identifying key issues is: What prevents us from complying with the requirements? It is important to make an example card to ensure that the participants fully understand the procedure.

The cards are filled out for each link as shown below:

Key activities within this link	Requirements of national market	Requirements of international markets	Buyer specific requirements	Key issues/hot topics
1.				
2.				
3.				
4.				
5.				
6.				

This process makes it possible to identify key issues for the chain by considering a concrete and well-defined requirement. This is the only way to identify specific and applicable solutions to problems and, thus, concrete actions.

The result will be a complete matrix of key issues for each link. Different groups may identify different issues since the links are reviewed based on requirements relating to standards, technical regulations and voluntary standards.

Once this process has been completed, the groups go from board to board reviewing the key issues identified and clarifying any questions.

### 3. Procedure

#### Steps:

1. Stakeholder inventory according to the main headings/links
    - a. Who is present? All participants write the name of their institution on cards
    - b. Who is missing? Groups summarize which stakeholders are important but not present and write their names on cards
  2. Activity Mapping – for each link identify up to 7 production or processing activities (focus on quality-relevant issues!)
  3. Identify requirements – arrange requirements according to the activities
  4. Gap analysis – compare required and available QI and CA services – highlight “hot topics” on cards
- Use different colors of cards for each categorie (activities, requirements and hot topics).

# 3d. Pyramid of Requirements

## 1. Instructions for application

<b>Objective/function</b>	To motivate the participants from companies and/or raw material manufacturers to focus on the topic of quality and understand the importance of complying with the quality standards demanded by different markets. In addition, to identify all the technical regulations, standards and certifications participants are familiar with.
<b>Application</b>	During the processing stage, after the brainstorming activity, it is possible to explain and discuss with participants the importance of complying with the standards demanded at the national and international level, and in different market segments
<b>Stakeholders involved</b>	The Calidena facilitators and the workshop participants
<b>Time required</b>	30 minutes
<b>Context</b>	As part of the workshop, when beginning to look at the requirements to be met in the production of a product from the chain under analysis
<b>Resources</b>	Pre-prepared diagram, markers, cards, boards
<b>Observations</b>	In developing countries, many consumers from market segments with low purchasing power make the decision to buy based largely on price and do not take into account information related to content, the veracity of information or other requirements that might guarantee health, safety and environmental protection (internationally established as legitimate objectives). In addition, given this reality, MSMEs target these segments of the market and regard compliance with standards as an additional cost rather than an investment with economic incentives. Thus, encouraged by the low level of controls carried out by the authorities, they violate mandatory compliance with technical regulations.

Compliance with standards also brings opportunities for companies in developing countries to enter new segments of the national market or more demanding international markets. We are referring here to more demanding groups of consumers with greater purchasing power as well as to exports to other countries with specific quality requirements and to markets that often demand their own certification (Fair Trade, Kosher, Halal, Rain Forest, GlobalGap, etc.). Compliance with these standards constitutes a competitive advantage for companies, with an economic reward, “the cherry on the cake”. For companies to be able to take advantage of these new opportunities, which include high profit margins, there must be a broader and more sophisticated supply of services that are internationally recognized.

## 2. Description

The participants are shown the following graphic and asked which technical regulations and standards they are familiar with. These are noted down on cards and stuck on the diagram.

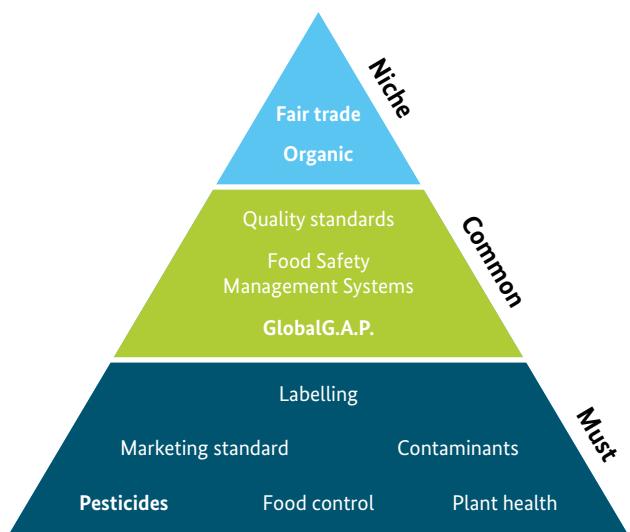


Figure 4. Source: CBI Market Information Database ([www.cbi.eu](http://www.cbi.eu))

set of services (metrology, testing laboratories, accreditation, etc.) provided by the national quality infrastructure. If there is no supply of services, large companies purchase them abroad, which leads to elevated operating costs.

At this point in the workshop, it becomes clear whether there is a lack of technical regulations in the country geared to the value chain under analysis.

At the same time, it is possible to clarify the differences between:

Compulsory	Voluntary
Technical regulations Legal metrology Legitimate interests of States (health, safety, environment) and the like	Standards Industrial metrology Commercial interests and the like

It should be explained that setting up a system for assessing conformity with these requirements is a necessary task for establishing a basic level that can serve to voluntarily encourage quality requirements in the provision of goods or services.

Care must be taken to avoid a sequential interpretation whereby basic standard must first be complied with before it is possible to begin to take advantage of the opportunities offered by more demanding and lucrative markets. In fact, the two processes develop simultaneously. In many developing countries where quality products are still lacking, it is possible to find companies that already meet high demands for quality and therefore export. Given this diversity, it is important for developing countries to pursue both avenues.

These two areas, i.e. the compulsory and the voluntary, can benefit each other, since they tend to use the same

## 3. Procedure

### Steps:

1. The participants are asked about which quality requirements for the value chain they know of, with a distinction being made between standards and technical regulations
2. The responses are displayed on cards and stuck on the diagram
3. An explanation is given of the difference between compulsory and voluntary requirements, and between legitimate objectives and commercial interests
4. If a lack of technical regulations or standards is detected at the national level, these are noted down on cards as hot topics related to quality within the chain
5. Working groups are then created for applied research (see Calidena Handbook, p. 24–27)

# 3e. Field Work Notes

## 1. Instructions for application

<b>Objective/function</b>	To orient the field work more towards results and facilitate the transfer of information to the mapping
<b>Application</b>	Used during the field trip to one or more companies, as well as in individual and group interviews
<b>Stakeholders involved</b>	The Calidena facilitators and the participants
<b>Time required</b>	The visits last between 90 and 120 minutes
<b>Context</b>	As part of the applied research
<b>Resources</b>	Notepad, pen

## 2. Description

The field work is organized by dividing the participants into groups, defining their roles and explaining the form for gathering information (see forms in appendix 7.5).

The field trips to producers or processors should provide the participants with an opportunity to collect relevant information and form an opinion (following the instructions provided by the Calidena moderator below). Considering these instructions will ensure that subsequent discussions about value chain mapping, the definition of “quality” of the value chain products, quality issues in the value chain and activity design, will be both profound and insightful.

When providing instructions for field visits, the moderator should encourage the workshop participants to observe and ask the owners/managers of the production/processing units they visit questions regarding the following aspects:

- Quality issues within the production/processing unit(s) visited (impression vs. reality)
- Internal quality control system and quality improvement strategies
- Perception of the quality issues of their suppliers (upstream from the value chain)
- Perception of the quality issues of their direct and of final customers (downstream from the value chain)
- Standards and technical regulations that are relevant

from the owner/manager point of view

- Use of quality services offered by supporting institutions, including testing, certification, calibration and accreditation
- Assessment of these services and impression of services which are missing
- Ideas for improving the quality of the products produced at the sites visited

Please print this list and provide a handout to each participant.

The groups then proceed to the institutions, organizations or companies to carry out interviews with the people who have been contacted in advance and have agreed to take part in this activity. On their return to the workshop room, the groups must analyze the information collected and transfer it to the digital file, which will later be incorporated into the workshop documentation.

During the interview at a company or laboratory, it is advisable to take advantage of the visit and ask the interviewee to give a tour around the facilities. These tours help to contextualize the information gathered during the interview and facilitate a deeper understanding of the topic.

If the visit or interview is carried out at a company in a specific link, it is a good idea to fill out a separate sheet for each one of the activities identified. A maximum of five can be filled out for each link.

When all the groups have returned, a quick plenary discussion is held to exchange opinions about the work carried out. This is an important step since interviews do not always go smoothly and the exchange is useful for off-loading any emotions that may have emerged during the process. In addition, the groups must read over the information cards they prepared and inform the others of their

findings. The information gathered is later added to the identification of the requirements for each activity.

Another option for the interviews may be a visit to an important company from the chain or an institution within the quality system. The advantage here is that quality aspects related to the link in which the company operates can be seen more clearly. It may also help provide a deeper understanding of the creation of added value when the producers of raw materials observe the different stages involved in processing their product, the result of which is the finished product on sale at the corresponding price.

<b>QI aspect or component</b>	<b>Current situation</b>	<b>Gaps</b>	<b>Proposals for improvement</b>
Quality system or Good Practice system	Does any concept or handbook of this kind exist?	In management or of a technical nature?	
Standards + TR	Which standard or technical regulation applies?	Are there any regulatory gaps?	Which standard is lacking or needs to be improved?
Conformity assessment	What certification do you use? What kind of external audits do you undergo?	Is there a lack of certification? What limiting factors are there?	
Metrology	What measurements are carried out? How often? With traceability?	Is there a lack of laboratories for relevant tests? Is there a lack of skilled personnel or technical teams?	How can the usefulness of the calibrations be improved?
Accreditation/national or international recognition	Are you accredited? And do you know who accredited the conformity assessment bodies: <ul style="list-style-type: none"><li>■ certifier</li><li>■ laboratory</li><li>■ inspection body?</li></ul> Is it recognized within the country or abroad?		

# 3f. Group Building

## 1. Instructions for application

<b>Objective/function</b>	To build small working groups and energize participants
<b>Application</b>	At several points in the workshop when groups need to be formed
<b>Stakeholders involved</b>	Participants and facilitator
<b>Time required</b>	10 minutes
<b>Context</b>	Spacious room with circle of chairs
<b>Resources</b>	Chairs and flipchart
<b>Observations</b>	There are several dynamic ways to build groups. Each facilitator should create his or her own repertoire.

## 2. Description

Example: "Fruit salad".

## 3. Procedure

Participants are divided into groups of the appropriate size for group work not by counting the number of persons but instead by naming different fruits, for example: Mango, Banana, Lemon, and Orange. Each person is assigned the name of a fruit. The participants all sit in a circle and must change places in response to the instructions given. If "mango" is called, all mango participants have to change seats, and so on with other fruits. The facilitator will also participate, so there is always one person left standing, who gives the next instruction.

When "fruit salad" is called, all the participants must change seats at the same time. Finally, groups are created according to the corresponding fruit.



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# 3g. Review of Documents and Internet Research

## 1. Instructions for application

<b>Objective/function</b>	To learn to locate and analyze standards and technical regulations
<b>Application</b>	During the workshop
<b>Stakeholders involved</b>	Small groups of participants for different markets (national, international, etc.)
<b>Time required</b>	A least 1 ½ hours
<b>Context</b>	Round tables for group work
<b>Resources</b>	One computer with internet access per group, folder with copies of relevant standards and technical regulations
<b>Observations</b>	The success of the exercise depends on the prior collection of material and good internet access

## 2. Description

In preparation for the exercise it is necessary to check whether there are any documents that are not available on the Internet and must be searched for in advance and taken to the exercise to be analyzed by a working group.

Information about standards and the regulatory framework can usually be found on the internet. This includes not only the requirements of the country of origin but also the country of destination, depending on the main client.

Several standards (all ISO standards and other private ones like the British Retail Consortium, see [www.brc.org.uk](http://www.brc.org.uk)) must be purchased. Nonetheless, at this stage of research useful summaries can usually be found on the Internet. The relevant standards can be obtained later from the national standards body or other organizations responsible for the sale of such materials.

The participants get into small groups to research the technical standards and regulations corresponding to the chain in their own country or the region and in the destination country. We asked the following questions:

- Technical standards and regulations relevant for the respective country or region
- Technical standards and regulations relevant foreign market
- Private or sustainability standards relevant for the chain

The necessary information for the specific product of the value chain under consideration can be found in the corresponding pages.

It is recommended that the small groups do not have more than three or four members and that there are enough computers with Internet access in the room where the event is held.

### Template to input info

Computers and internet access need to be available. Before the workshop, it is recommended that the facilitator, with the support of the Calidena host, draw up a list of the standards and technical regulations that apply to the chain and/or sector. Don't forget private standards, see [www.standardsmap.org/identify](http://www.standardsmap.org/identify).

## 3. Procedure

### Steps:

1. Inventory of standards and technical regulations (see matrix)
2. Building small groups
3. Selecting relevant standards and technical regulations
4. Paper and internet research
5. Summarizing information on template
6. Gathering and printing out all the information
7. Gallery of results presented on walls or panels

# 3h. Action Plan

## 1. Instructions for application

<b>Objective/ function</b>	To agree on concrete ways to implement the actions required to achieve the objectives outlined in Calidena and involve the relevant actors in the process
<b>Application</b>	It will be necessary to develop and document actions and concrete measures to be implemented within the scope of the Calidena objectives
<b>Stakeholders involved</b>	Host organization of the Calidena process, representative of the QI, facilitator of the process.
<b>Context</b>	With the intervention of the moderator, and with the members of the Calidena Committee formed during the exercise, a meeting/workshop will be convened to prepare the action plan
<b>Resources</b>	Flipchart, facilitation panels, facilitation materials
<b>Observations</b>	It is necessary to have a clear idea about the strategic orientation of the QI and its role in implementing the action plan. The action plan must be developed jointly with the key actors, who share responsibility for its implementation.

## 2. Description

The action plan is developed for a specific time period and must be constantly updated by the Calidena committee. The plan should include the core activities, responsibilities and milestones in the process of implementing a strategy, ie: who does what and when.

Operational planning involves designing and planning these processes, in other words, translating scarce resources into operations, measures and efficient services. Operational planning is an opportunity, but also a challenge, since it is necessary to:

- promote cooperation between the actors through the shared procedure
- create transparency and a balance between project-based planning and planning based on the organizations of all cooperation partners
- achieve an appropriate, binding and trust-based decision on the allocation of resources
- create synergies between the cooperation partners' action strategies

This action plan is short-term (100 days) and will lay the foundations for the value chain actors themselves to later draw up an annual operating plan or a medium and long-term strategic plan, to achieve the desired impacts.

## 3. Procedure

In order to obtain the commitment of the key stakeholders and achieve the desired results within the scheduled timeframe, it is necessary to organize a participatory workshop. Based on the inputs obtained in the Calidena exercise, the facilitator will draw up a proposal for an action plan, which should be validated at the participatory workshop with the key actors involved.

The people acting at the strategic level of the project promoted by Calidena should participate in the process. It is also useful to involve stakeholders at the operational level, who are responsible for implementing the agreed measures. Care must be taken when selecting participants, since the complexity of the process also increases with the number of people.

### Step 1: Review the strategy

Here, the strategic orientation of the National Quality Infrastructure body/bodies will be examined. The following guiding questions will be useful for this purpose:

- What do we wish to achieve? The objectives set with Calidena are taken as a reference.  
Priorities are established, and risks are considered (hypothesis of results)
- How can we achieve this? At the end of this step, the pertinent conclusions for planning can be drawn:  
What are the strategic objectives?
- What indicators can help us recognize if we are on the right track?

<b>Strategic plan</b>	
Strategic objectives and indicators	Action lines/packages

### Step 2: Plan milestones and activities

In this step, the action packages from step 1 (lines of action) are developed and translated into activities that will be implemented. In other words: the activities are planned, the milestones are agreed (date by which an activity should have ended), the persons in charge are appointed and the estimated resources and budget are allocated.

<b>Planning milestones</b>				
Lines of action	Activities	Milestone (deadline for achievement)	Person in charge	Resources and budget

### Step 3: Resource planning and allocation

The milestone planning provides a sufficient basis for implementation. More detailed planning can be done later by the people in charge of the project.

### Step 4: Document the process

All operational planning is documented following the steps described; this lays the foundation for the implementation of Calidena based on results.

<b>Action plan</b>																		
<b>Lines of action</b>											<b>Resources needed</b>	<b>Status*</b>						
#	Activity	Indicator	Calendar (until when)										<b>Person in charge</b>	# expert days	Financial ressources			
			J	F	M	A	M	J	J	A	S	O	N	D				
1																		
2																		
3																		
n																		

\* Colours in monitoring system: Moving forward as planned Delayed No progress

# 3i. Involving Decision Makers

## 1. Instructions for application

<b>Objective/function</b>	To obtain institutional commitment from those in charge of institutions and business associations, since they do not often participate in the workshop and the participants at the technical level do not have decision-making power
<b>Application</b>	At the end of the Calidena workshop
<b>Time required</b>	120 minutes
<b>Context</b>	A results dissemination event immediately after the workshop
<b>Resources</b>	Laptop, data show
<b>Observations</b>	<p>To guarantee the sustainability of the actions agreed on at the Calidena workshop, it is important to report on the workshop results. To this end, an invitation can be sent out to either a dissemination event or a round table or results dissemination meeting. The invitees will be:</p> <ul style="list-style-type: none"> <li>■ The corresponding authorities, from both the QI and the ministries responsible</li> <li>■ Manufacturers and/or business associations</li> <li>■ The different programs and projects dedicated to the economic development of the countries and the value chain analyzed in the workshop</li> <li>■ Depending on the circumstances, those present at the workshop may also attend in order to give an account of the processes undergone during the event</li> </ul>

## 2. Description

In many cases, representatives of the QI and business associations participate to some extent in the workshop inauguration and their technicians participate in the processes throughout the workshop.

It is essential to send out an invitation to this presentation in advance, in other words, at almost the same time as the invitation to the workshop, and it is necessary to carry out a follow-up in order to guarantee a high level of participation.

A workshop participant presents the workshop results, and these are discussed along with the need for institutions and associations to take on commitments.

## 3. Procedure

### Steps:

1. The workshop results are presented in PowerPoint
2. The presentation must include a brief description of the Calidena methodology
3. The presentation focuses on the critical points identified and the actions that need to be taken to overcome any deficiencies
4. A discussion is held on the workshop results and any questions are answered
5. The activity is brought to a close preferably with a toast

# 3j. Workshop Documentation

## 1. Instructions for application

<b>Objective/function</b>	To systematize learning
<b>Application</b>	During and after the workshop
<b>Stakeholders involved</b>	Special person only responsible for this task
<b>Time required</b>	2–3 days (preparation, workshop and ex-post processing)
<b>Context</b>	Separate space in the workshop
<b>Resources</b>	Laptop, camera
<b>Observations</b>	The person in charge should be provided with documentation from previous workshops

## 2. Description

An external person should be put in charge of the documentation, sometimes a member of staff of the host organization

To document the event properly, it is important to take pictures of all boards and live scenes during the workshop, interviews and visits to companies. These serve to identify the participants with the process and results.

It is thus necessary to appoint someone to be in charge of the documentation and have another person take pictures.

It is useful to transcribe the boards with the contents of the diagnosis. For the workshop facilitation, it is important to obtain a guided summary with the notes written on the cards. It is not necessary to document all verbal interventions during the workshop, only those relevant to achieving results. The facilitator should guide the person in charge of this matter. This training material should be saved on a USB stick and handed out to the participants. Alternatively, it could be posted on the website or shared via an online cloud.

We recommend creating a summary document for each workshop. The recipients of this document will be the workshop participants and other interested parties within the corresponding chain. This document should be brief and concise to facilitate quick reading.

## 3. Procedure

### Steps:

- Selection of person in charge of documentation and person in charge of photos
- Introduction by facilitator
- Taking notes and photos of panels during the workshop
- Processing information in template.

Don't forget to take a group photo!

# Part 4 – Tools for Follow-up

## 4a. Follow-up Workshop

### 1. Instructions for application

<b>Objective/function</b>	To provide follow-up for the action plan drawn up at the Calidena workshop
<b>Application</b>	Three to six months after the Calidena workshop
<b>Time required</b>	Between four and eight hours (depending on the progress made in the implementation of the action plan)
<b>Context</b>	A monitoring workshop with the same participants as the Calidena workshop, facilitated by one of the Calidena facilitators involved in the Calidena workshop
<b>Resources</b>	Laptop, Data show, boards, markers, cards
<b>Observations</b>	The follow-up workshop will be facilitated by a Calidena facilitator. The return of the external facilitator tends to be a motivating factor for all those involved.

### 2. Description

When the 100 days of the Work Plan are up, it is advisable to organize a second workshop. This one should be shorter in duration, for example a one-day intensive workshop. The same group of business stakeholders and representatives of supporting institutions should participate, probably with the addition of a few new stakeholders who were contacted during the implementation stage of the proposals. The workshop will be organized, like the first one, by the host institution with the support of an experienced Calidena facilitator.

The second workshop may have the following objectives:

- To assess and review the progress of actions
- To provide an opportunity to broaden and deepen the analysis
- To carry out new joint activities

For a better analysis of the chain, it is possible to review the key issues in depth on a more specific and detailed level, including the standards and regulations identified as critical up to the operations level of each link. This may be done as a group activity on the absolute condition that stakeholders from each link participate.

When drawing up the action plan at the Calidena workshop, dates are also set for the meetings of the follow-up committee and for a follow-up workshop within three to six months after the implementation of the action plan has begun. As far as possible, the same Calidena workshop participants should attend.

It is necessary to plan a round of introductions since there are always new members, due to institutional changes or obstacles to attendance. There may also be new participants who are attracted by the topic and what they have heard about the first workshop.



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The core of the workshop is the discussion on the progress made in implementing the agreed actions, those actions still outstanding and the identification of new actions. At this point, it is possible to see whether the follow-up committee and those in charge of the different actions have really fulfilled their responsibilities.

It is also important to analyze any obstacles to implementing the action plan. After reviewing and complementing the action plan, it is decided who will take charge of the following steps and specific dates are set. All of the steps are displayed on cards placed on the boards.

### 3. Procedure

#### Steps:

- Welcome
- Introduction of the participants
- Presentation of the program and objectives
- Review of the progress made in implementing the agreed actions
- Identification of actions still outstanding
- Identification of necessary new actions discovered during the process
- Definition of precise dates and persons in charge
- Planning of the follow-up committee's work

This results in an updated action plan, as shown in the example below:

Action plan						
Action proposal	How	Progress	What is needed	New actions	Dates	Those in charge
Elaborate guide of Good Agriculture Practices (GAP)						
Elaborate guide of Good Manufacturing Practices						
Revise and updates standards						
Calibration campaign						
Acreditation of food safety laboratory						

# 4b. Impact Monitoring Based on Results

## 1. Instructions for application

<b>Objective/function</b>	To give an overview of the steps needed to create a results-based monitoring system, which will make it possible to measure impacts at the value chain level, and define the indicators used
<b>Application</b>	The tool can be applied at the beginning of a Calidena process to build a results-based monitoring system
<b>Participants</b>	Host organization of the Calidena process, QI representatives, process facilitator
<b>Time required</b>	Ongoing
<b>Context</b>	With the intervention of the moderator, and with the members of the Calidena committee formed during the exercise, a meeting/workshop will be convened to create the monitoring system. The participation of a representative of the QI is required.
<b>Resources</b>	Flipchart, pin boards, facilitation materials
<b>Observations</b>	<p>It will be necessary for the facilitator to know the details of the cooperation program or project under which the Calidena process is being carried out.</p> <p>Monitoring should be focused on a chain of results (milestones, results, activities) and a map of process actors. Ideally, the facilitator will already have spoken to the coordinator of the cooperation project about the way it has been structured.</p>

## 2. Description

The monitoring system will help to continuously verify the progress made on achieving the objectives and results agreed in the action plan. The Calidena action plan requires a monitoring system based on results, in order to be able to:

- Report on the progress of the action plan (verification)
- Know what works well and where it is necessary to make adaptations (learning)
- Make strategic decisions based on data monitoring (driving)
- Promote dialogue on applied strategy and operational planning (communication)
- Provide a basis for reports and evaluation (accountability)

## 3. Procedure

### Step 1: Prepare, verify and adapt the results model

The first step is to prepare a results model for Calidena based on the results that can be expected from the project or program. The following guiding questions may prove very useful. Do those involved in Calidena understand the importance of the project? Which actors should be involved? Can the actors contribute their knowledge to help achieve the results? How will the decisions be made? Who takes on the various roles and responsibilities?

### Step 2: Clarify the demands placed on the results-based monitoring system

It will be necessary to clarify what is demanded of the results-based monitoring model. The following questions will help participants to understand the model better. Which actors in the chain and the QI should be involved in the fundamental decisions on the process? What inter-

ests and expectations do the actors in the chain and the QI have with regard to Calidena? Which actors should be involved in the monitoring process and what will their responsibilities be?

#### **Step 3: Convert the results into measurable criteria**

It is necessary to define indicators in order to be able to measure whether the objectives and desired results established in the action plan have been achieved. The indicators must be objectively verifiable, that is, they must be SMART, i.e., specific, measurable, achievable, realistic and time-bound).

The indicators should describe what is achieved, but not how it is achieved:

- Plan monitoring in detail: A detailed monitoring instrument must be established for the entire duration of the Calidena action plan. Carry out (regular) collection and analysis of data: The following points should be collected for all indicators and recorded in the monitoring instrument (baseline/value data, meta/milestones; real values; analysis of the degree of scope of the objectives and/or indicators)
- Take advantage of results-based monitoring findings

The conclusions of the results-based monitoring may be useful to both the project or program coordinator and the QI, with regard to:

- Management of the project or program (strategy decisions, project management, budget, etc.)
- Accountability, checking results, preparing reports, etc.
- Internal knowledge management of the project, documentation and communication, as well as to support learning processes

## 4c. Reflection Workshop with QI

### 1. Instructions for application

<b>Objective/function</b>	To share the Calidena workshop results with the QI decision makers in the country and integrate the results into the institutions' action plans
<b>Application</b>	At the end of the Calidena workshop
<b>Time required</b>	Two to four hours
<b>Context</b>	A results dissemination event immediately after the workshop
<b>Resources</b>	Laptop, data show, flip chart
<b>Observations</b>	A critical success factor for carrying through the actions agreed on in the action plan is the participation and incorporation of the QI institutions. Since experience shows that the decision makers from these institutions do not participate in the entire process of a Calidena workshop but instead only attend the inauguration and perhaps results presentation, it is necessary to open up a space for reflection between them and the workshop facilitators. To ensure that better explanations are provided, it is necessary for the technicians from the institutions who attended the Calidena workshop to also be present, since they are able to explain the workshop results firsthand and in greater technical detail.

## 2. Description

With the heads of the QI institutions present, each point is reviewed. Consideration is then given to how to include these actions in each institution's action plan, how to carry them out and how to obtain funding, where necessary. The results of the reflection workshop are written up into an operating plan, which includes concrete actions, the dates when they will be carried out and the names of the persons in charge.

An agreement is drawn up on the commitments, copies of which are given to Calidena workshop follow-up committee, the intermittent coordinator of the PTB project, the project coordinator at the PTB and the intermittent consultants of the PTB.

Despite the small size of a country, and the level of its SMEs, it is possible to enter into agreements that lead to changes in the productive sectors and a necessary increase in conformity assessment services, which is why the proposal is to obtain a commitment from the member companies in the chain to gradually incorporate quality systems:

<b>Stages involved in leading the SMEs in a chain towards Quality Management</b>				
<b>Stages/stakeholders</b>	<b>Self-commitment</b>	<b>Good practices</b>	<b>Certification of product</b>	<b>Implementation of a quality system</b>
	<b>Stage I</b>	<b>Stage II</b>	<b>Stage III</b>	<b>Stage IV</b>
Companies/SMEs	Definition of own criteria: "How do we define a quality product of ours?"	Introduction of good practices (i.e. implementation of the 5S methodology)	Certification of product	Implementation of a Quality Management System
Unions and business associations	Raising awareness among their members of the importance of quality	Disclosure of good practices	Support for certification	Support for certification
Service providers: laboratories and certifiers	Raising awareness of companies regarding benefits of certification	Facilitating the introduction of good practices	Provision of certification and testing services	Provision of certification and testing services
National Quality System bodies	Information about the National Quality System	More detailed information about the services of the National Quality System	Provide support with information about the reliability of service providers	Provide support with information about the reliability of service providers

The objective of a Calidena project is achieved when the companies in a chain accept the advantages of a quality management system and take over leadership in collaboration with the services of the National Quality System. This ownership will be a gradual process.

Because of the lack of information among SMEs and the high initial costs of insertion into the world of quality, an initial impetus is required from the public sector and/or international cooperation. It is also important that from the beginning of the process donors define an exit strategy to facilitate the self-management and sustainability of the process. The pattern of support provided by those involved might continue along the lines described in the following table:

Pattern of support:

	<b>Stage I</b>	<b>Stage II</b>	<b>Stage III</b>	<b>Stage IV</b>
International Cooperation	Very high	High	Low	None
System bodies	Low	Medium	High	High
Companies involved	Very low	Low	Medium	High

Another matrix could also be used:

		<b>Clients</b>	
		Existing	New
<b>Products</b>	Existing	1) Improving the status quo	2) Extension of existing services to new clients
	New	3) Expansion of new services	4) Expansion of both services and clients



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### 3. Procedure

#### Steps:

1. Reviewing the key points identified at the workshop and the actions drawn up.
2. Discussing their inclusion in the institutional operating plans.
3. Drawing up an action plan for carrying out the actions, if the institutions do not have operating plans.
4. Drawing up an agreement on commitments.

# 4d. Small Action Fund

## 1. The Halfway Problem

One criticism made by QI body representatives about the Calidena pilot experiences has been the lack of co-funding for concrete projects. The PTB finds itself in a dilemma here. On the one hand, its projects usually have access to limited resources, but on the other, a Calidena process generates multiple proposals for continuous improvement that exceed the financial framework of PTB projects and require additional funding.

To avoid this situation, it is important that a Calidena initiative should be integrated into the country's priorities on sectoral economic policy. If there are either national programs or international cooperation projects to promote chains, then resources are usually available to finance such projects. However, in practice, we find that many projects of this kind tend to have their own logic and timeframes. Sometimes there are no resources for topics related to QI; in other cases, it takes too long for resources to become available. Actions must therefore be feasible with available resources, immediately implementable and demonstrate visible results in no more than three months. If a plan is more ambitious, then it is advisable to apply the Salami Technique, which is to say, to take small steps towards achieving a bigger objective, like cutting slices from a sausage.

An additional motivation might be for PTB's International Cooperation Department (or other donors) to set up a Small Action Fund (SAF) to finance the implementation of initial actions agreed on in the Work Plan at the end of a Calidena workshop.

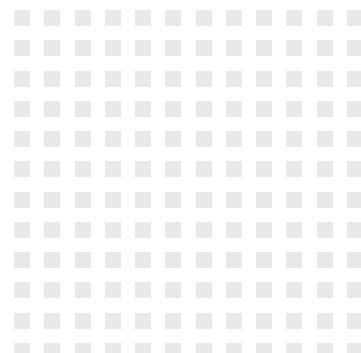
It might be even more motivating if the action proposals have to compete for funding. This type of contest would be something of a novelty within the framework of PTB projects and would require greater commitment from the counterparts/beneficiaries.

## 2. Endowment and rules

It is proposed that PTB projects, including those that work with the Calidena approach, always set up a SAF. This fund has an endowment, which will be determined by the coordination group according to the PTB implementation criteria. It would be advisable to establish a relevant amount of funding per year/project. Actions will only receive co-funding from the SAF if they are agreed in the action plan drawn up within the framework of a Calidena workshop.

To increase the beneficiary's commitment, co-funding may be requested. Since this request may slow down the process, care should be taken with this requirement. One or several actions may benefit from a SAF. If there are various proposals, they should be evaluated according to their contribution towards promoting the use of quality services in the corresponding chain and their contribution towards the development of the QI of the corresponding country.

The final decision on funding is taken by the project coordination group. It should not take more than 4 weeks for a proposal to be approved following submission of a descriptive document.



# 4e. Documentation of Case Studies

## 1. Instructions for application

<b>Objective/function</b>	To summarize the key results and learnings of a Calidena process
<b>Application</b>	At the end of a formal Calidena process
<b>Time required</b>	One to three expert days (according to the field research needs)
<b>Context</b>	Desk research by a Calidena facilitator. Could include interviews and conversations with key stakeholders.
<b>Resources</b>	Laptop, documents of the Calidena process
<b>Observations</b>	The case study should be approved by the Calidena hosts and published on the website <a href="http://www.calidena.org">www.calidena.org</a> <sup>1</sup>

## 2. Description

The documentation for the case is part of the information management of each Calidena project. It will prove useful for the stakeholders themselves and for any external organization that is looking for evidence of the methodology's potential.

The template could already be used for the feasibility study and should be updated in the different phases of the process.

Different sub-groups, i.e. QI representatives, VC actors and core management team, could be asked to reflect separately on the learnings.

## 3. Template

Key data	Case	
	Country	
	Dates	
	Stage	<input type="checkbox"/> Ongoing <input type="checkbox"/> Closed
	Facilitator	
Problem		
Host stakeholders		
Quality chain analysis		
Actions for improvement		
Learning	For the VC	
	For the QI	
	For the methodology	

<sup>1</sup> The website is currently under construction and will be hosted at another platform. An announcement on the newly established website will be provided via <https://candela-ptb.de>

# 4f. Knowledge Management

## 1. Instructions for application

<b>Objective/function</b>	To identify and ensure relevant knowledge based on successful experiences and failures with Calidena
<b>Application</b>	When planning the Calidena exercise, it is advisable to define what the knowledge objectives will be and plan the development of knowledge products
<b>Stakeholders involved</b>	Calidena facilitator, and person in charge from the organization leading the Calidena exercise
<b>Context</b>	Calidena planning workshop
<b>Resources</b>	Project or program documents that facilitate the presentation of key experiences and learning
<b>Observations</b>	The tool focuses on the development of knowledge products rather than on the systematic structuring of knowledge management. It serves to identify and ensure relevant knowledge and to process that knowledge so that it can later be exchanged.

## 2. Description

Knowledge is the basis for continuous improvement and learning, both at the level of individuals and organizations, as well as the environment. Knowledge management has a dual purpose: on the one hand, the knowledge and experiences that emerge from implementation, in this case from Calidena, encourage joint learning by participants. On the other, they serve to transmit the knowledge generated in the framework of Calidena to the organizations involved in the process, especially to the QI.

### Step 2: Develop knowledge products

The following criteria will help define the knowledge products:

- The project contributes to the solution of a relevant “problem” or responds to a new market opportunity in a specific country or sector, or in the region; or reflects any of the priorities defined by the QI
- The host organization is taking ownership of the Calidena process and plans to use the methodology by its own
- The initiative is sustainable in financial terms and has been replicated at least once following the applications of Calidena
- Efficiency in the implementation: the objective has been met and the desired results have been achieved in the scheduled timeframe
- Efficiency: the objective and results have been achieved, while optimizing the financial, material, technical and human resources available
- The initiative has achieved innovation in processes, products or services at the country, sector or regional level
- The beneficiaries of the project claim to have achieved positive change as a result

## 3. Procedure

### Step 1: Plan knowledge objective

Knowledge management is the responsibility of all the actors involved in Calidena. Therefore, it should be part of the planning of the exercise, during which the stakeholders must define what the knowledge products will be. What knowledge do they want to process or document? What knowledge will be useful to both the VC and the QI? What knowledge could reduce the learning curve? zations involved in the process, especially to the QI.

### Step 3: Elaboration of the template to identify knowledge products

1. Name of the initiative/good practice/success story	
2. Countries involved	
3. Counterparts/partners	
4. Summary of the initiative (background and development)	
5. How has the methodology worked?	
6. Impacts, changes, improvements, successes achieved	
7. Lessons learnt	
8. Possibility of transferring learnings	
9. Contact information (address, key person to contact, position, telephone, e-mail, web page)	

## 4g. Documentation of Calidena Case Studies

### 1. Instructions for application

<b>Objective/function</b>	To document the shared understanding of the results achieved through the successful application of a Calidena process
<b>Application</b>	The tool is applied once the Calidena exercise has been completed. However, small achievements can be documented during the application.
<b>Stakeholders involved</b>	Host organization, QI officials, facilitator of the process
<b>Time required</b>	One or two expert days
<b>Context</b>	The resulting information will be systematized as the exercise is carried out and small milestones are met in the application of Calidena
<b>Resources</b>	Information collected during Calidena, photographs, testimonies of those involved in the process, binding documents (rules, regulations, cooperation agreements, etc.)
<b>Observations</b>	A case study can provide learning on specific issues such as, for example, mobilization of the competent authority, stimulating the local market, access to new markets, the effective promotion of the QI and its services within a productive chain, etc.

## 2. Description

One practical recommendation is to develop a simple “results or impact chain” when planning the application of Calidena. This will enable you to identify activities, milestones and results over time. Examples of success stories will also be provided to facilitate documentation. In addition, it will be necessary to “negotiate” with the host what success stories can be expected from the application of Calidena.



Figure 5. Source: Own elaboration

## 3. Procedure

### Step 1: Identification of the case study

Explain in which value chain the methodology was applied, locate country and region, indicate important dates (beginning, end), current status of the case (feasibility study underway, in the process of implementation, finalized) and indicate the name of the facilitator or facilitators involved.

### Step 2: Summary

Summarize the problems that arose during the exercise and explain what measures were taken to ensure the effective involvement of the QI and private sector. Also indicate to which sector the productive chain belongs, main products or services, current or potential markets for export, etc.

### Step 3: Challenge

Summarize the main problem that was able to be solved by applying Calidena:

- Use of QI services as a result of Calidena: Identify which QI services were implemented in the measures that resulted from the Calidena exercise
- Lessons learned: Mention the following: What lessons did the QI learn as a result of applying Calidena? What were the lessons learned by the value chain? What new learnings were contributed to the methodology?
- Benefits: Include a brief testimony by one of the key stakeholders, as well as photographs illustrating the process.

## 4h. Future Linkage of the QI with the Value Chain

### 1. Description

<b>Objective/function</b>	To identify the key stakeholders and their interests, in relation to the change objective being pursued through the implementation of Calidena, which will enable the effective future linkage of the value chain and the QI
<b>Application</b>	It is useful and well-suited for coaching, self-reflection by the stakeholders in charge or reflection within the Calidena Committee, to prevent interactions between stakeholders from becoming a potential source of errors and conflicts in the future, especially when different partners emerge. Cooperation for the execution of Calidena.
<b>Stakeholders involved</b>	Calidena host organization, representatives of the QI, facilitator of the process.
<b>Context</b>	Small groups, trained, if possible, by those involved in the process (mini workshop)
<b>Resources</b>	Document handouts
<b>Observations</b>	The tool assesses the interests of the key stakeholders. Therefore, a high degree of openness and trust is required. Under ideal conditions, it is applied once the map of key stakeholders has been drawn up.

The interests of the key stakeholders do not always coincide completely with the project objective. This is understandable given that the project may be highly innovative in nature, as in the case of Calidena. Any change is often met with skepticism and opposition. Ultimately, the actors discover the dissonance between their interests and the change objective when they are asked to stop working in their usual way and learn something new. Traditionally the QI is not linked to the VC and it is thus necessary to define who the key actors will be that can enable this connection in the future.

To prevent the work plan developed through the project from being blocked, it is necessary to keep in mind the interests of all stakeholders. If the key actors can express their viewpoints, then it is possible to intervene in a timely manner and reduce any uncertainty as well as opposition to an effective future linkage between the QI and the Value Chain. This helps create an environment that is open to negotiations, and favorable to the changes you wish to achieve in the short and medium term.

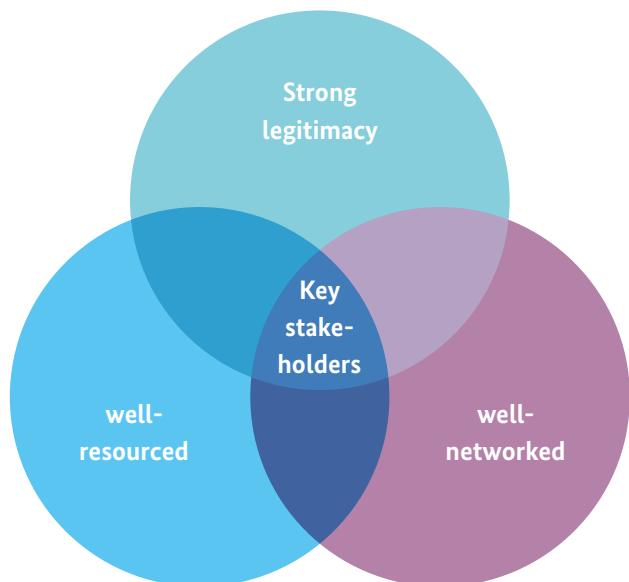


Figure 6. Source: Chevalier, Jacques M. and Buckles, Daniel J. A. 2008: Guide to Collaborative Inquiry and Social Engagement, Ottawa

## 2. Procedure

### Step 1: Establish the degree of compliance with the objective of the Calidena process

During the analysis of the position of the key actors in relation to the objectives of Calidena, it is essential to ask the questions necessary to fully understand the situation. Guiding questions might be:

- What interests do the key stakeholders have regarding the objectives and impacts of the Calidena process?
- To what extent do these interests comply with the objectives of the Calidena process?
- What effect does this match or mismatch have on the objective of the Calidena process?
- What strategic options do you need to develop to broaden the scope for action, win the support of the stakeholders and eliminate obstacles?

These dimensions are discussed for each relevant key stakeholder with the aid of the following table and then noted down in summarized form.<sup>1</sup>

<sup>1</sup> Adapted from the GIZ GmbH 2015: Cooperation Management for Practitioners, Wiesbaden, Tool 11 "Interest of key actors."

<b>Issues at stake and objectives of the Calidena process</b>				
<b>Key stakeholders</b>	<b>Interests</b> in relation to Calidena process	<b>Compliance</b> with objective from -- to ++	<b>Possible effects of harmony, dissonance or indifference</b>	<b>What to do?</b> (options for broadening the scope of action)
Stakeholder 1				
Stakeholder 2				
Stakeholder 3 n				

### Step 2: Map conflicting objectives

<b>Matrix of conflicting objectives</b>			
<b>Key stakeholders</b>	<b>Compliance</b> with objective from -- to ++	<b>Change</b> (in terms of: legitimacy, resources, networking)	<b>Fears and anticipated losses</b>
Stakeholder 1			
Stakeholder 2			
Stakeholder 3 n			

To better analyze the possible conflict of objectives, the following questions can be posed:

- To what extent might the project change the legitimacy, access to resources and networks of key stakeholders
- What fears or anticipated losses might motivate the actions of key stakeholders

### **Step 3: Discuss matrix of conflicting objectives**

In this step, jointly discussing the situation as captured by the simplified matrix of conflicting objectives can:

- Help identify beliefs that actors share
- Enable facilitators to address and work through conflicting objectives with key actors early on

### **Step 4: Address conflicts**

It is necessary to face the possible conflicts that may arise between the actors involved in the Calidena process, without trying to hide them. Every conflict of interest is basically composed of three elements: the two parties to the conflict and the issue causing conflict, which the reason for the disagreement. The two parties in conflict usually adopt opposing positions, which provokes anger, so they each try to weaken the other's position and strengthen their own. When dealing with conflict, it is a matter of getting the actors involved to focus on the issue.

This process can be broken down into three phases and presented as follows:

#### **Phase 1**

We hold contrary positions. The other stakeholder is the problem, he/she is inflexible and stubborn. We stick to our position, because, we are right.

#### **Phase 2**

We focus on the issue at stake. We see the issue differently, and we recognize the fact that our interests are different.

#### **Phase 3**

We study the issue in greater depth. We find that exchanging different perspectives and negotiating interests leads to compromise or visible agreement.



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# Part 5 – Training of Calidena Facilitators

## 5a. TOT Tool: Options

There are two possible options for carrying out a Training of Trainers (TOT) for Calidena facilitators depending on the potential candidates identified within the field of PTB cooperation projects:

- A) For professionals with knowledge of economic development and/or the quality system, who do not have training and/or experience of workshop facilitation.
- B) For high-level professionals with experience of workshop facilitation and good knowledge of the topics of economic and business development and/or the quality system.

### **Option A)**

The idea is to train Calidena facilitators using a combination of training in the method and simulated application based on the case study entitled “the President’s sweater”. What is proposed, then, is a workshop with a mixture of knowledge transfer on the concepts of value chains and the quality system and practical exercises on teaching and adult learning, combined with training in basic moderating instruments. The first application of the Calidena workshop sequences is carried out in the room with the workshop participants.

The proposal for a “training workshop” implies that the learning process is presented in a practical manner and continually oriented towards the activities carried out within the Calidena process.

The actual application of what has been learned takes place after the training workshop in direct relation to a real Calidena exercise with a value chain.

The workshop must be led by a multidisciplinary facilitation team that combines the necessary knowledge and experience of economic topics, particularly value chains and quality systems, as well as experience in training facilitators. This enables the broad experience gained so far during the implementation, systemization and con-

solidation of the Calidena method to be imparted to participants in an integrated manner.

### **Overall objective**

“The participants have strengthened their ability to apply the Calidena method in processes of continuous quality improvement in value chains”.

### **Specific objectives**

The participants are expected to have:

- Learned basic facilitation techniques
- Become familiarized with the Calidena concept
- Practiced using the instruments proposed by Calidena in an experimental manner

Following the training, the participants are expected to be in a position to conduct Calidena workshops, initially under the supervision and guidance of the trainers. Once participants have performed two Calidena workshops under these conditions and been positively evaluated by the trainers, they will be accredited as Calidena facilitators, with the support of the PTB.

### **The participants**

Those invited will be professionals with experience in different fields related to economic development or the development and functioning of the QI. What matters is their interest and willingness to work in an interdisciplinary manner on the topic of quality management in value chains. This will also depend largely on their work situation, since having a regular job does not always make it possible to do additional work through service provision.

It is not necessary to have experience in workshop facilitation since this is introduced as part of the workshop. If there are participants with prior experience in workshop facilitation, the workshop sequences can be changed to reduce this section.

The suggested number of participants is fourteen to sixteen people, to allow for sufficient critical mass in the simulated execution of the Calidena workshop.

### The contents

1. Concepts related to teaching adults and facilitation tools:

- Characteristics of the facilitator
- Appropriate use of materials and resources
- The golden thread: concept and application
- The session: design, planning, organization, execution and monitoring
- The art of teaching and its key elements
- The cycle of learning
- Types of participants: how to deal with them
- The visible and invisible aspects of a group process
- Own perception versus others' perception

2. Introduction to the concept of value chains and economic development:

To work based on shared concepts regarding economic development and value chains, it is necessary to lay some conceptual foundations according to the Calidena methodology. The introduction is made through presentations given by the ToT trainers.

3. Introduction to the functioning of quality systems:

It is also necessary to develop a shared understanding

of the concept of the QI and its functioning. Since a lot of information about the QI is expected to be provided, an introduction to the topic is essential. This introduction can be aided by the PTB film on QI as well as the various brochures and displays created by the PTB for use in different contexts.

4. Application of the Calidena methodology in the event room:

The participants carry out practice exercises in pairs, based on the Calidena handbook. Sequences from the workshop are prepared using the handbook and put into practice with the group of participants. A fictional case study, "the President's sweater", has been created for this purpose, to lead participants through defining the roles of each of the stakeholders in the chain, carrying out the mapping of stakeholders, conducting applied research on the requirements of different markets, identifying critical points, drawing up solutions and the action plan.

The trainers observe each session and then provide analysis and feedback. The feedback begins with a self-assessment by the facilitators being tested, followed by comments from the group and finally the trainers.

The following program is proposed for the ToT:

Day 1	Day 2	Day 3	Day 4	Day 5
Welcome	The golden thread; reflection on the golden thread	Golden thread	Golden thread	Golden thread
Presentation of participants, objectives and program, levelling of expectations	The session: design, planning, organization, execution and monitoring	Types of participants and how to deal with them	Practice: Introduction to the concept of value chains	Practice: Applied research
Reflection on the opening phase	The cycle of learning	Introduction: The concept of value chains	Practice: The quality system	Practice: Identification of problems
Characteristics of the facilitator	The visible and invisible aspects of group processes	Introduction: The concept of quality infrastructure	Practice: Mapping of the stakeholders and identification of the activities in each link	Practice: Identification of the solutions and creation of an action plan
The appropriate use of materials and resources	Own perception vs. others' perception	Introduction: The Calidena methodology	Practice: Identification of the demands of different clients/markets	Clarification of doubts and queries
Evaluation of the day	Evaluation of the day	Preparation of the Calidena exercise	Evaluation of the day	Final evaluation of the event

For the evaluation of participants, the following criteria are applied:

- Active participation and interest shown in the topic in the training workshop
- Understanding and grasp of the Calidena methodology
- Participation in the preparation of the Calidena practice exercises
- Performance as a facilitator (a) during the practices and (b) during application, when applying the techniques taught
- Maturity and understanding demonstrated in the self-assessment and respect for the feedback given by the facilitators and other participants

#### **Option B)**

This proposal is aimed at training a group of high-level professionals to be Calidena facilitators. They must have extensive knowledge of the topic of economic development and/or the quality system. They also need to possess broad experience of workshop facilitation. The number of participants can range from fourteen to sixteen people.

In general, the same principles explained above also apply, except that there is no training in moderating techniques, although they are applied in the event room. Participants are required to have studied the Calidena handbook in

advance so as to familiarize themselves with the methodology.

On the introductory first day, the participants deepen their knowledge of the topics of value chains and quality systems and receive an explanation of aspects of the Calidena methodology, its sequence and main points.

During the afternoon of the first day, concrete preparation is made for the workshop. This involves the participants getting into mixed pairs for each one of the workshop sequences and determining the precise division of work. In addition, all the necessary materials and the room must be prepared for the simulated execution of the Calidena workshop. The concrete preparation also serves to deepen the participants' understanding of aspects of the Calidena methodology, while all the time the trainers are there to give recommendations.

For future applications, the participants should already be in a position to work in pairs they themselves have formed, either under the supervision of one of the methodology trainers, or paired up with one of the trainers.

The criteria for the trainers' evaluation of the participants are the same as for option A).

The program is shown below:

<b>Day 1</b>	<b>Day 2</b>	<b>Day 3</b>
Welcome	Golden thread	Golden thread
Presentation of participants, objectives and program	Practice: Introduction to the concept of value chains	Practice: Identification of problems
Introduction: The concept of value chains	Practice: The quality system	Practice: Identification of solutions and creation of an action plan
Introduction: The concept of quality infrastructure	Practice: Mapping of stakeholders and identification of activities in each link	Clarification of doubts and queries
Introduction: The Calidena methodology	Practice: Identification of the demands of different clients/markets	Evaluation of the event
Preparation of the practice based on the case study "The president's sweater"	Practice: Applied research	
Evaluation of the day	Evaluation of the day	

Two more detailed teaching plans have also been developed, along with all the necessary materials, for implementing the two alternatives. These can be found on the webpage [www.calidena.org](http://www.calidena.org).

# 5b. Calidena Motivation Workshop

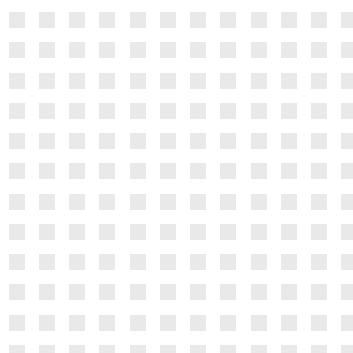
## 1. Instructions for application

<b>Objective/function</b>	To obtain institutional commitment from the heads of institutions, since technical level participants often do not have decision-making power
<b>Application</b>	Familiarization with the Calidena methodology
<b>Time required</b>	480 minutes
<b>Context</b>	A motivation and awareness-raising workshop for institutions interested in finding out about the methodology. Facilitation is provided by one or two Calidena facilitators
<b>Resources</b>	Laptop, data show, boards, cards, markers
<b>Observations</b>	Calidena is already well known within the PTB cooperation community, due to its participation in many different PTB programs and projects. Nonetheless, different stakeholders from the QI and the private and public sectors still have doubts and questions about its usefulness and value, as well as about the process itself. In addition, if we want to teach the methodology to a public beyond the PTB, for example to other cooperation agencies and programs, it must be presented in a way that adequately highlights the benefits of the method. The Calidena guide aims to provide the relevant arguments.

## 2. Description

The different sessions of a Calidena workshop are reproduced in a condensed form and accompanied by methodological explanations. One highly important part is the final session with the necessary reflections, which is designed to clear up any remaining doubts and focus on the possibilities of applying Calidena to important and/or prioritized value chains within the country.

An emblematic product is used as an example. It is also possible to use the didactic case study “the President’s sweater”, which refers to the production and export of a camelid wool sweater from an Andean country.



### 3. Procedure

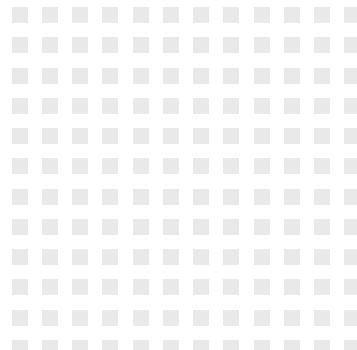
#### Steps:

The participants introduce themselves, stating their name, where they are from and what they expect to get out of the workshop	20'
<p>The human chain: A human chain is formed according to the criteria, for example (depending on the group of participants), "how long have I been in contact with quality issues?". The participants hold hands. They try to push the chain from one end, reacting only to the force produced by the previous person. Next, they try to pull the chain and it moves in the direction from which the force originates.</p> <p>Reflection on the functioning of the chain.</p> <p>An explanation is then given of the value chain diagram found in the handbook.</p>	20'
<p>A sweater is pinned to a board with cards explaining the following clients' demands:</p> <ul style="list-style-type: none"> <li>■ Identification of the raw material</li> <li>■ Corresponding sizes and measurements</li> <li>■ Dye residues</li> <li>■ Working conditions</li> <li>■ Traceability/green certification</li> </ul>	10'
Film: The industrialization of alpaca	10'
<p>Participants are organized into groups using the "fruit salad" technique with the following elements: Dye, sweater, wool, knitting, thread.</p> <p>Groups are then formed for: alpaca rearing, spinning, knitting.</p>	10'
In their working groups the participants analyze the case study texts and identify the activities corresponding to each link	10'
The results of the group work are presented and displayed on the boards	10'
The clients' demands, technical regulations, standards and certifications are presented, and any questions are answered	15'
<p>In the same groups, the participants analyze the case study texts to identify the demands with regard to:</p> <ul style="list-style-type: none"> <li>■ Identification of the raw material</li> <li>■ Corresponding sizes and measurements</li> <li>■ Dye residues</li> <li>■ Working conditions</li> <li>■ Traceability/green certification</li> </ul> <p>The results are presented on cards displayed on the boards, which are organized according to links</p>	30'
The participants return to their groups to analyze the problems described, and these are displayed on cards for each link	20'
<p>In the same groups, they come up with solutions to overcome the problems encountered.</p> <p>The results are presented on cards displayed on the boards, organized according to links.</p>	15'
An explanation is given on how to create an action plan based on the solutions worked out	10'
<p>Reflection phase, writing cards (if this workshop is done with representatives from the QI, the reflection should centre on the possibilities for applying Calidena in the country):</p> <p>"What did I learn in the exercise?"</p> <p>"What remaining doubts do I have?"</p> <p>Any doubts and questions are answered.</p>	30'

# Part 6 – Synopsis

The table differentiates between basic and complementary tools and organizes them according to the phases of the Calidena process:

Phases	Preparation	Workshop	Follow-up
Basic tools	<ul style="list-style-type: none"> <li>■ Value chain selection</li> <li>■ Communication guide</li> <li>■ Prior mapping of the chain</li> <li>■ Feasibility study</li> </ul>	<ul style="list-style-type: none"> <li>■ Participation of buyers</li> <li>■ Value chain mapping</li> <li>■ Field work notes</li> <li>■ Action plan development</li> </ul>	<ul style="list-style-type: none"> <li>■ Follow-up workshop</li> <li>■ Documentation of case studies</li> <li>■ Documentation of Calidena success stories</li> </ul>
Additional tools	<ul style="list-style-type: none"> <li>■ Stakeholder mapping</li> <li>■ Double client check</li> <li>■ Preliminary field trip</li> <li>■ Management of expectations</li> <li>■ Learning from buyers</li> <li>■ Calculation of times and costs</li> </ul>	<ul style="list-style-type: none"> <li>■ Living value chain</li> <li>■ Group building</li> <li>■ Review of documents and Internet research</li> <li>■ Pyramid of requirements</li> <li>■ Involving decision makers</li> <li>■ Workshop documentation</li> </ul>	<ul style="list-style-type: none"> <li>■ Small action fund</li> <li>■ Reflection workshop with QI</li> <li>■ Impact monitoring based on results</li> <li>■ Knowledge management</li> <li>■ Future linkage of QI to value chain</li> </ul>



# Annexes

## 1. Value chain selection criteria

VC selection criteria	VC1	VC2	VC3	VC4	VC5	VC6
GIZ-supported (i.e. preselection according to socio- economic criteria*)						
Synergies with GIZ project during implementation						
Economic relevance						
Prevalence of quality issues						
Basic QI exists						
Relative simplicity of VC						
Linkages with other PTB project components						
Awareness of the need for quality improvement						
Motivation to dedicate time and resources						
Mutual willingness of QI and VC actors to interact						
<b>Total</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>

3 = Strong   2 = Medium   1 = Weak   0 = None

\* Market demand, SMEs, employment, export potential, etc.

## 2. Letter of invitation and registration

Mr/Mrs xxx

Dear Sir/Madam,

For a number of years, the German National Metrology Institute (PTB) has been supporting the strengthening of quality systems (country name) and has also focused on encouraging exports and participation in global trade.

In this context, you are cordially invited to the workshop “Quality Management in the Preserves and Marmalades value chain in Guatemala, with a view to exporting to the European Union”.

The event will be held on (date), from 8.00 am to 5.00 pm, in the Oxford Conference Room in the Princess Hotel, located on Palm Street, in Anytown.

The objective of this workshop is to identify key problems related to product quality in the links of the marmalades value chain in Guatemala, in response to the requirements of the European Union, and to draw up recommendations for improving the services offered by the institutions in the quality system.

To confirm your attendance please fill out the registration form attached and send it to the following e-mail address: xxx by xxx (date) at the latest.

If you have any questions or comments, please contact xxx (telephone xxx, cell phone xxx)

Yours faithfully,

xxx

### 3. Preparation countdown plan

<b>When?</b> (x = workshop date)	<b>What?</b>	<b>Who?</b>	<b>How?</b>
x -10 weeks	<ul style="list-style-type: none"> <li>■ Generate interest in the Calidena methodology among the main stakeholders of the value chain</li> <li>■ Identify the host for the Calidena process</li> </ul>	Technical assistance organization, Quality system, Representatives of the interested sector or chain, Calidena host	<p>Awareness-raising workshop with important stakeholders of the chain or sector, the quality system and the technical assistance organization to define the specific product to be worked on in the exercise under the supervision of a Calidena facilitator.</p> <p>Follow the criteria below for identifying a host:</p> <ul style="list-style-type: none"> <li>■ Good reputation in the value chain</li> <li>■ Good connections with both the business sector and local government</li> <li>■ Ability to sustain the quality process after diagnostic</li> </ul>
x -9 weeks	Set the date for the Calidena exercise	Technical assistance organization, Calidena host	Reach an agreement with local stakeholders and facilitators
x -8 weeks	Invite representatives of clients to the workshop or prepare their representation	Technical assistance organization, Calidena host	<ul style="list-style-type: none"> <li>■ Identify foreign and domestic buyers of the product from the chain</li> <li>■ Invite via e-mail, explaining the conditions of participation (travel costs, allowances and fees)</li> <li>■ In the event that participation is not possible, carry out a telephone or written interview</li> </ul>
x -7 weeks	Initiate the selection process for the participants of the Calidena exercise	Calidena host with the collaboration of the technical assistance organization	<ul style="list-style-type: none"> <li>■ The criteria for identifying possible candidates are centred on the following requirements: 100 % availability during the Calidena workshop</li> <li>■ A certain level of recognition, prestige and reputation in the value chain</li> <li>■ Good understanding of business and economic issues</li> <li>■ From the public sector, business sector, NGOs and educational institutions</li> </ul>
x -6 weeks	Establish the list of participants for the workshop	Technical assistance organization, Calidena host	Analyze potential participants: See the list presented under "Calidena tools". Establish the number of attendees. The recommended number is between 20 and 25 people.

Continued on next page

<b>When?</b> (x = work-shop date)	<b>What?</b>	<b>Who?</b>	<b>How?</b>
x - 5 weeks	Set the date and venue for the workshop	Technical assistance organization, Calidena host, facilitators	<p>Criteria to decide the venue:</p> <ul style="list-style-type: none"> <li>■ Adequate size to accommodate the established number of guests established</li> <li>■ Easy access, enough room for parking, internet access on the premises</li> <li>■ Check the conditions and internet access personally</li> </ul>
x - 5 weeks	Hire the venue for the workshop	Technical assistance organization, Calidena host	Contract
x - 5 weeks	Determine the number of interviews. Draw up a preliminary list of candidates for interviews.	Technical assistance organization, Calidena host, Calidena team (participation is not clear, neither is its composition)	See criteria and suggestions under “Calidena tools”
x - 5 weeks	Invite the participants to the workshop. Ask them to bring laptops.	Calidena host	Explain the importance of using at least three of the six channels of communication: face-to-face, telephone, fax, letters, e-mail, SMS
x - 5 weeks	Arrange appointments for the interviews	Calidena host	Explain the importance of using at least three of the six channels of communication: face to face, telephone, fax, letters, e-mail, SMS
x - 4 weeks	Follow up on the guests and speakers	Calidena host	Explain the importance of using at least three of the six channels of communication: face to face, telephone, fax, letters, e-mail, SMS
x - 3 week	Get all the material and equipment ready to use during the workshop	Facilitators	Gather together the boards, video beams, laptops, and buy all the material mentioned in “Calidena tools” if necessary
x - 1 week	Follow up on the interviews	Calidena host	By telephone
x	Implementation of workshop	Calidena host, facilitators	Prepare the boards and cards necessary for beginning of the workshop

## 4. Responsibility matrix

Activity	Host	Co-Host	Facilitator 1	Facilitator 2	Status	Deadline
Planning meetings	✓	✓	✓	✓		
Confirming workshop dates	✓	✓	✓	✓		
Contracting consultants	✓					
Venue (classroom style)	✓	✓	✓	✓		
Technical equipment: Projector, computer, P.A System, etc.		✓		✓		
Media	✓	✓				
Program design and agenda	✓		✓	✓		
Lunch & snacks	✓					
Welcome address – confirmation of speakers	✓	✓				
Booking hotel reservations	✓	✓				
Transport: Airport – hotel (and venue)		✓				
Workshop materials: Folders, markers, cards, notepads, pens, pencils, flip chart pads and brown paper	✓	✓				
Travel: Facilitators	✓					
Initial draft report			✓	✓		
Office support: Photocopying, printing, etc.		✓				
Evaluations	✓	✓				
Certificates	✓	✓				
Registration of participants		✓				
Close-out meeting	✓	✓	✓	✓		
Final report				✓		
Handing-over of project		✓				

## 5. Detailed Schedule for Workshop Moderation

The facilitation instructions for the initial Calidena exercise provide the guideline for conducting the workshop – this includes a description of the thematic units, procedures, techniques and necessary resources, as well as the estimated timeframes for each sequence.

It is important to emphasize that this is a guideline, not an order that has to be carried out to the letter. Its execution depends on the participating groups, their speed of learning, their academic level, etc.

The facilitation team should meet for at least the full day before the workshop to review and adapt the entire schedule step-by-step and assign specific roles.

### Day 1:

Thematic unit	Procedure	Technique	Resources	Time
Welcome	A top representative from an important institution or company within the chain	Oral presentation		5'
Warm up	How does the future of the sector look? Growing or shrinking market?	Closed question Thermometer or meter	Board, round stickers and workshop cards for comments	15'
■ 1. Opening ■ Introduction of participants	■ Introducing visual display rules: legible handwriting, one idea per card, no more than 7 words in 3 lines ■ The participants fill out cards with: Name, Origin, Position and expectations ■ Introduction at front	■ Individual work ■ Plenary	■ Cards ■ Markers ■ Boards	30'
Introduction of objectives and agenda	■ The stated expectations are reviewed and compared to the objectives of the workshop ■ The agenda is presented	Plenary Guided dialogue Presentation		10'
2. Conceptual basis: value chain	The concept of the chain is developed as explained in the description of the sequence	Guided dialogue	■ Cards ■ Markers	45'
Quality	Facilitator asks, "What do YOU understand by quality?" Answers are written on the cards	Activity: forming chains	Sufficient space Cards and markers	15'

Continued on next page

**Day 1 (cont.):**

	<ul style="list-style-type: none"> <li>■ 3. The chain</li> <li>■ The links of the chain and its stakeholders at a micro level</li> </ul>	<ul style="list-style-type: none"> <li>■ A space is marked out with adhesive tape on the floor for each link. A square is also marked out for supporting organizations, such as projects, etc.</li> <li>■ Participants write out cards with the name of their institution, organization or company</li> <li>■ Participants position themselves in the spaces marked according to their location in the chain</li> <li>■ Participants stick the corresponding cards on the boards prepared for each link and for supporting institutions then go back to their seats</li> </ul>	<ul style="list-style-type: none"> <li>■ Brain storming</li> <li>■ Plenary</li> <li>■ Activity: mapping on the floor</li> </ul>	<ul style="list-style-type: none"> <li>■ Large workshop cards with the titles of the links and levels</li> <li>■ Adhesive tape</li> <li>■ Cards</li> <li>■ Markers</li> <li>■ Prepared boards</li> </ul>	30'
	<ul style="list-style-type: none"> <li>■ In work groups organized according to link they complete the stakeholders for each link and level, and put up the cards with the names on the corresponding boards, respecting their function as business/producers, quality services, standards and regulatory institutions</li> <li>■ Results from work groups are presented</li> </ul>	<ul style="list-style-type: none"> <li>■ Group work</li> <li>■ Plenary</li> <li>■ Guided dialogue</li> </ul>	<ul style="list-style-type: none"> <li>■ Cards</li> <li>■ Markers</li> <li>■ Prepared boards</li> </ul>	30'	
	<ul style="list-style-type: none"> <li>■ A sequence of activities is created in work groups for each link and is marked with cards on the boards for each link</li> <li>■ The results are then presented in a plenary session</li> </ul>	Group work	<ul style="list-style-type: none"> <li>■ Cards</li> <li>■ Markers</li> <li>■ Prepared boards</li> </ul>	60'	
<b>Lunch break</b>					
Quality requirements	<p>A brain storming session is carried out on:</p> <ul style="list-style-type: none"> <li>■ What relevant standards and technical regulations are there for the chain's product?</li> <li>■ Cards are arranged according to</li> <li>■ National technical regulations to be met (country of origin)</li> <li>■ Mandatory national standards. Country of destination.</li> <li>■ Private standards</li> </ul>	<ul style="list-style-type: none"> <li>■ Brain storming</li> <li>■ Plenary</li> </ul>	<ul style="list-style-type: none"> <li>■ Cards</li> <li>■ Markers</li> <li>■ Boards</li> </ul>	30'	

Continued on next page

**Day 1 (cont.):**

4. Research on quality requirements	<ul style="list-style-type: none"> <li>■ Work groups are organized for Internet research and the review of documents. The number of groups will depend on the number of standards and technical regulations identified.</li> <li>■ Research topics refer to the chain's product: Mandatory quality standards and technical regulations in the country of origin.</li> <li>■ Mandatory quality standards and technical regulations in the destination country in Europe</li> <li>■ Private standards</li> <li>■ Information gathered is applied by filling out the corresponding workshop cards</li> </ul>		<ul style="list-style-type: none"> <li>■ Enough laptops with Internet access</li> <li>■ Electronic information flash cards and printed cards</li> </ul>	180'
Evaluation of the day	<ul style="list-style-type: none"> <li>■ What was the most surprising thing about the day for me?</li> <li>■ What questions do I have?</li> </ul>	Plenary	<ul style="list-style-type: none"> <li>■ Cards</li> <li>■ Markers</li> </ul>	15'

**Day 2:**

Thematic unit	Procedure	Technique	Resources	Time
Golden thread	Throwing the ball with questions about contents from the previous day	Plenary	Ball made of cards with questions	15'
<ul style="list-style-type: none"> <li>■ Preparation</li> <li>■ Field work</li> </ul>	Preparation of field work		Copies of information form	30'
Field work	The participants carry out the field work.			180'
Lunch break				
Quality system in the country	Report on the quality system in the country by a representative of the system. Distinguish between the concepts of: metrology, calibration, certifications and accreditation for types of standards and technical regulations	<ul style="list-style-type: none"> <li>■ Plenary</li> <li>■ Presentation</li> </ul>	<ul style="list-style-type: none"> <li>■ Video beam</li> <li>■ Laptop</li> </ul>	30'
Identification of key issues	In the same workgroups the information gathered is copied on to different colour cards and the requirements identified are displayed according to activities per link	Plenary	<ul style="list-style-type: none"> <li>■ Flash card in digital and printed form</li> <li>■ Cards, markers</li> </ul>	90'
	Participants walk from one board to another and each group presents the results of their investigation and answers any questions	Activity walkabout		60'
	<ul style="list-style-type: none"> <li>■ Evaluation of the day</li> <li>■ What belief or conviction did I lose today?</li> </ul>			15'

**Day 3:**

<b>Thematic unit</b>	<b>Procedure</b>	<b>Technique</b>	<b>Resources</b>	<b>Time</b>
Golden thread	The crux of Calidena	Individual plenary	Cards prepared according to the number of participants	45'
■ Continued ■ Identification of key issues in each link	■ In the same groups per link key issues are identified: Question: "What is the problem preventing compliance with the requirements?" ■ Key issues are written on pink cards and stuck on the boards, next to the requirements identified	Group work	■ Cards ■ Markers	30'
5. Action plan	■ The pink cards are then moved to another board with the outline of an action plan ■ In the same groups, an action plan is created with a timetable of between three and six months, people in charge and resources necessary to improve quality services in the value chain in the country ■ Guiding question: "What actions are needed to overcome the situation?" ■ Criteria: Where can we contribute? Where can we achieve a significant change? ■ Where can results be achieved quickly?	Plenary	■ Boards ■ Cards ■ Markers	30'
	The follow up committee is created: What must it do? What must it NOT do?	Plenary		30'
Final evaluation of the event	The learning island. There is an anonymous final evaluation of the event	Individual Plenary	■ Cards ■ Markers ■ Copies of the evaluation sheet	30'
	Closing of the event and handing out of participation certificates and documentation CD		Certificates	15'

## 6. Form for recording the results of internet research

Summary could be done in PowerPoint format.

Institution or company the visited website belongs to	
Website address	
Name of the standard	
Brief description of the standard	
Relevant requirements for the different links (fill in according to the name of the link)	Link 1  Link 2  Link 3

## 7. Workshop evaluation form

Factors to evaluate	Poor	Fair	Good	Very good
<b>Contents</b> In relation to your expectations, how would you rate the workshop? What are the possibilities for you to apply the contents in your work?				
<b>Methodology</b> What did you think of the facilitation techniques? What was the level of participation like? What was the work environment like during the sessions?				
<b>Facilitators</b> Grasp of contents: Facilitated participation by everyone: Relationship with the participants:				
<b>Materials</b> What do you think about the materials? <input checked="" type="checkbox"/> amount <input checked="" type="checkbox"/> usefulness				
<b>Venue/refreshments</b> Do you think the venue was appropriate for the workshop? What do you think about the location of the venue? How were the refreshments during breaks?				
<b>Quality of workshop</b> What is your overall view of the workshop? How did you feel during the workshop?				

**Additional questions might be:**

- What did you learn above all from the workshop?
- In your opinion, how could we improve this workshop?

**Other comments:**

.....

.....

.....

## **8. The stupid cow syndrome**

This story could be told to explain the relevance of the value chain approach for product quality:

The Monitor Company worked for the government and private sector leaders of Colombia to study and provide recommendations on how leather producers in that Andean nation could become more prosperous by exporting to the United States. We began in New York City to find the buyers of leather handbags from around the world and we interviewed the representatives of 2,000 retail establishments across the United States. The data were complex but boiled down to one clear message: the prices of Colombian bags were too high, and the quality was too low.

We returned to Colombia to ask producers what lowered their quality and forced them to charge high prices. They told us: "It is not our fault". They said it was the fault of the local tanneries that supplied them with the hides. The tanneries had a 15 % tariff protection from the Colombian government, which made the prices of competing hides from Argentina too expensive.

We travelled to the rural areas to find the tannery owners. The tanneries pollute the nearby ground and water with toxic chemicals. The owners answered our questions happily. "It is not our fault", they said. "It is the fault of the slaughterhouses. They provide a low-quality hide to the tanneries because they can sell the meat from the cow for

more money with less effort. They have little concern for damaging the hides."

We went into the country side and found slaughterhouses, with cowhands, butchers and managers wielding stopwatches. We asked them the same questions and they explained that it was not their fault; it was the ranchers' fault. "You see", they said, "the ranchers over brand their cows in an effort to keep the guerrilla – some of whom protect the drug lords – from stealing them." The large number of brands destroys the hides.

We finally reached the ranches, far away from the regional capital. We had reached the end of our search, since there was no one left to interview. The ranchers spoke in a rapid local accent. They told us that the problems were not their fault... "It is the cow's fault". The cows are stupid, they explained. They rub their hides against the barbed wire to scratch themselves and to deflect the biting flies of the region.

We had come a long way, banging our laptop computers over washboard-surfaced roads and exposing our shoes to destruction from the chemicals in the tanneries and mud. We had learned that Colombian handbag makers cannot compete for the attractive American market because their cows are dumb.

Source: Michael Fairbanks, BLAME THE COW FOR NO PROSPERITY, <http://tinyurl.com/62kqt8>

## 9. LoI hand-over process

**Letter of intent**  
 between  
**Physikalisch-Technische Bundesanstalt (PTB)**  
 Braunschweig, Germany  
 and  
**host organization (abbreviation)**  
 Location of the organization

The Physikalisch-Technische Bundesanstalt (hereinafter referred to as 'PTB') is the National Metrology Institute of Germany with the highest technical authority under the auspices of the Federal Ministry for Economic Affairs and Energy (BMWi), Germany.

The (*host organization*) (hereinafter referred to as '*abbreviation*') (short description of the organization).

PTB has been commissioned by the Government of the Federal Republic of Germany to implement a bilateral (*Country*)-German project aimed at supporting the national quality infrastructure (QI). The objective of this project is to (*project purpose*). In that line of activity, a basic agreement of mutual understanding and cooperation between (*host organization*) and PTB was already signed on (*Date*) to support and implement a cooperation process between the Country QI and stakeholders of the (*product*) value chain.

For the purposes of this activity PTB provided its internationally proven Calidena methodology. Calidena is based on a rapid participatory assessment of a value chain. The focus is on the present quality of the processes and products in each one of the links. It specifically addresses the capacities and weaknesses of quality-related services, including certification, inspection, standards, testing and calibration laboratories (*Quality Infrastructure*).

On (*Date*) (*host organization*) hosted the kick-off workshop of a participatory diagnosis of the (*product*) value chain and PTB provided its corresponding Calidena methodology and supported the process with technical experts and facilitators. The workshop ended with the elaboration of an action plan which was implemented to a large extent together with different stakeholders over the following months. (*host organization*) led the implementation

process with the advice and support of PTB's project staff and especially the local facilitator sponsored by PTB.

Since then several follow-up workshops have been organized by PTB and (*host organization*). In each step activities were presented and evaluated. As the process is now coming to an end, PTB will hand over the responsibility for all the upcoming activities to the host of the joint process, (*host organization*).

PTB and (*host organization*) (collectively referred to as the '*Parties*') have reached the following understanding:

### Article 1 – Purpose

The parties agree jointly to hand over the Calidena process for the (*product*) value chain in (*Country*). The focus of the activities is on (*specific products*). The purpose of this cooperation agreement is to define the roles and responsibilities of each party within this process.

### Article 2 – Contributions of each party

The Calidena hand over process starts with a workshop to introduce the successes so far and to develop an action plan with the according responsibilities, budget and contributions from (*host organization*) and financial and consultancy support from PTB until the project end on (*Date*). To achieve the objective of the Calidena hand over process, PTB and (*host organization*) will contribute the following:

#### A. Contributions of PTB

PTB will:

##### ■ Final workshop and handing-over

1. provide an experienced Calidena moderator with a general understanding of the working of Quality Infrastructure and of value chains.
2. train a local Calidena facilitator to support (*host organization*) in leading the follow-up phase and the implementation of the action plan until the end of the project phase on (*Date*).
3. co-sponsor the systematization of results and impacts of the Calidena experience.
4. participate in the dissemination of the project and its results (documents, videos, etc.).
5. continue to support the implementation of the action plan until the end of the project in (*date*), according to written application for support from (*host organization*).

6. co-finance agreed activities within the action plan, especially in the areas of (specify, e.g. testing laboratories) until the end of the project on (*Date*).
7. identify the appropriate workshop venue.
8. bear the costs related to the workshop, including updating all the participants, inviting international participants (e.g. foreign customers, import promotion desk Germany, PTB experts); and workshops organized by (*host organization*) in relation to the Calidena process based on a short proposal with justification sent to PTB for its approval prior to the workshop.
9. provide organizational support until the project end on (*date*) to arrange workshop facilities, catering and local transport for the site visit according to written application for support from (*host organization*).
10. prepare the host body (*host organization*) to take the lead for the follow-up activities by giving the facilitator training to the focal persons of the host body

#### **B. Contributions of (*host organization*)**

The (*host organization*) as a host is a respected organization of the (*public/private*) sector and will:

##### **■ Final workshop and handing-over**

1. provide a steering structure, this model should serve to continue the process, but also enable (*host organization's*) staff to kick-start similar processes for other value chains in the area of (*host organization's*) mandate.
2. provide the necessary resources
  - a. human, starting from the handing over point
  - b. materials in sharing with PTB until (*Date*), then bearing the cost alone
  - c. financial, from the beginning of (*Date*) to continue working with the quality value chain approach in the (*specify*) sector.
3. provide a joint work and time frame for the next half year and the supporting budget necessary for:
  - a. activities and responsibilities
  - b. evaluation of the process, has the partnership met the expectation?
4. support the action groups to implement and finalize their activities.
5. assign a focal person from their institute who will take charge of facilitating the process and the follow up on activities from that point onwards.
6. carry out a survey among the customers to evaluate the increase in satisfaction:
  - a. increase in the number of analysed samples
  - b. increase in the number of offered methods and parameters
  - c. increase in the number of customers.

7. document lessons learned.
8. document the activities from the whole process.
9. take the lead in the implementation and upgrading of the Calidena action plan.

##### **■ Follow-up phase**

10. motivate and lead a team of various public and private actors to implement the action plan.
11. monitor the ongoing work of the different working groups and the implementation of the action plan, in close cooperation with the local facilitator.
12. identify further stakeholders or donors who can contribute to the implementation of the action plan and involve them in the process.
13. implement the tasks from the action plan related to the responsibility of (*host organization*).
14. contact PTB in the event that technical support is needed for the implementation of the action plan.

#### **Article 4 – Amendment**

This agreement may be amended at any time by the parties, by mutual consultation and documentation.

#### **Article 5 – Miscellaneous activities**

Any additional activities or measures relating to the enhancement of the QI work are subject to prior approval of PTB until (*Date*).

#### **Article 6 – Settlement of disputes**

Any dispute arising out of or in connection to this agreement shall be resolved amicably in good faith by direct consultations between both the parties.

**For and on behalf of**  
(*Host organization*)

(*Name and position of signatory*)

**For and on behalf of PTB**

(*Name and position of signatory*)

*Place*

*Braunschweig, Germany*

*Date*

*Date*

**Witness (*host organization*)**

**Witness PTB**

## 10. LoI with host organization

**Letter of intent**  
 between  
**Physikalisch-Technische Bundesanstalt (PTB)**  
 Braunschweig, Germany  
 and  
**host organization (abbreviation)**  
 Location of the organization

The Physikalisch-Technische Bundesanstalt (hereinafter referred to as 'PTB') is the National Metrology Institute of Germany with the highest technical authority under the auspices of the Federal Ministry for Economic Affairs and Energy (BMWi), Germany.

The Name of *host organization* (hereinafter referred to as '*abbreviation*') short description of the host organization. PTB has been commissioned by the Government of the Federal Republic of Germany to implement a bilateral (*country*)-German project aimed at supporting the national Quality Infrastructure (QI). The objective of this project is to (project purpose).

In the framework of this project of the German Development Cooperation, PTB provides its internationally proven Calidena methodology for the (*product*) value chain. Calidena is based on a rapid participatory assessment of a value chain. The focus is on the present quality of the processes and products in each one of the links. It specifically addresses the capacities and weaknesses of quality-related services, including certification, inspection, standards, testing and calibration laboratories (Quality Infrastructure).

(*Host organization*) has expressed its willingness to act as host of the Calidena process for (*product*).

PTB and (*host organization*) (collectively referred to as the 'Parties') have reached the following understanding:

### Article 1 – Purpose

The parties agree to jointly carry out the Calidena process for the (*product*) value chain in (*country*). The focus of the activities is on (*specific product category*). The purpose of this cooperation agreement is to define the roles and responsibilities of each party within this process.

### Article 2 – Contributions of each party

The Calidena process starts with a kick-off workshop that brings together the representatives of the value chain to identify quality gaps and define an action plan with suitable and rapidly implementable solutions. After the Kick-off Workshop, periodic reports and meetings to exchange on the progress made towards the defined actions and to define follow-up activities will be held. The process is set to run for approximately one year.

For achieving the objective of the Calidena process, PTB and (*host organization*) will contribute the following:

#### A. Contributions of PTB

PTB will:

##### ■ Kick-off Workshop

1. provide an experienced Calidena moderator with a general understanding of the working of Quality Infrastructure and of value chains.
2. train a local Calidena facilitator to support (*host organization*) in leading the follow-up phase and the implementation of the action plan.
3. provide organizational support to arrange workshop facilities, catering and local transport for the site visit according to written application for support by (*host organization*)
4. update all the participants and invite international participants (e.g. foreign customers, PTB experts).
5. bear the costs related to the workshop, based on a short proposal with justification sent by (*host organization*) to PTB for its approval prior to the workshop

##### ■ Follow-up phase

6. support the implementation of the action plan according to written application.
7. co-finance agreed activities within the action plan, especially in the area of (specify; e.g. testing laboratories).
8. provide the necessary support for continuous progress monitoring and for the organization of follow-up events.
9. participate in the dissemination of the project and its results (documents, videos, etc.).

## B. Contributions of (host organization)

The (*name of host organization and abbreviation*) as a host is a respected organization of the (*public/private*) sector and will:

### ■ Kick-off workshop

10. act as official host of the event, including:
  - a. supporting the preparation of the participant list
  - b. sending the official invitations to the workshop
  - c. ensuring representation of the organization throughout the workshop
  - d. giving an opening statement and closing remarks.
11. provide organizational support to arrange workshop facilities, catering and local transport for the site visit in collaboration with PTB.
12. support the preparation and implementation of the workshop with the following activities (include specific activities the host needs to support based on Annex 4, p. 63).
13. participate in review sessions after each workshop day to evaluate the event, define possibilities for improvement and solve urgent issues that might have arisen.

### ■ Follow-up phase

14. implement the tasks from the action plan related to the responsibility of (*host organization*).
15. motivate other actors to engage in the necessary activities to implement the action plan.
16. exchange regularly with PTB about the progress made on the action plan.
17. support the organization and participate in follow-up meetings.
18. identify further stakeholders or donors who can contribute to the implementation of the action plan, and involve them in the process.

## Article 4 – Amendment

This agreement may be amended at any time by the parties, by mutual consultation and documentation.

## Article 5 – Miscellaneous activities

Any additional activities or measures relating to the enhancement of the work of the quality infrastructure are subject to prior approval of PTB.

## Article 6 – Settlement of disputes

Any dispute arising out of or in connection to this agreement shall be resolved amicably in good faith by direct consultations between both Parties.

### For and on behalf of

(*Host organization*)

(*Name and position of signatury*)

### For and on behalf of PTB

(*Name and position of signatury*)

*Place*

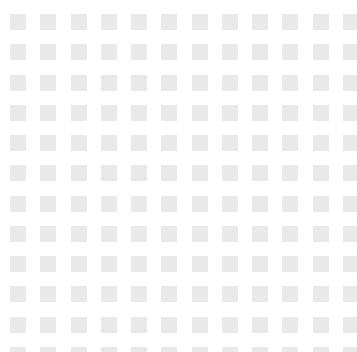
*Date*

*Braunschweig, Germany*

*Date*

**Witness** (*host organization*)

**Witness** **PTB**



## 11. Checklist for equipment and materials

<b>Equipment</b>	
6 pin-boards (also known as “ZOPP boards”)	
1 flipchart	
1 personal computer	
1 printer (make sure you can connect it to the PC!)	
1 LCD beamer (for PowerPoint presentations)	
1 digital photo camera	
Copy machine or have a copy shop nearby	
<b>Materials</b>	
40 sheets Kraft paper (118 x 140 cm)	
20 flipchart papers (72 x 99 cm)	
400 rectangular cards in 5 light colors (purple, yellow, blue, green, orange) (9.5 x 20.5 cm)	
1,000 rectangular white cards (9.5 x 20.5 cm)	
200 oval cards in 5 light colors (11 x 19 cm)	
40 title strips (9.5 x 54.5 cm)	
20 black markers (with 2–6 mm pen stroke)	
9 markers in other colors (blue, green, red)	
600 pins (Ø 6 mm)	
4 rolls masking tape (2.5 cm stroke)	
3 glue sticks	
500 sheets A4 paper in white (80 g/m <sup>2</sup> )	
20 pencils	
1 ruler 1 m in length	
1 pair of scissors	
1 packet of sweets	
<b>Informative material</b>	
20 QI-Brochures (16 pages)	
20 folders for the photocopies and material	
<b>Comments</b>	
Sent by PTB	

Calculation is based on the assumption of 20 participants

## Notes

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