

# External evaluation - – SHORT REPORT

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## Improving Quality Infrastructure in ASEAN



Country | Region: Southeast Asia – ASEAN Countries  
Project number: 2013.2265.0  
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Lead executing agency: Physikalisch-Technische Bundesanstalt (PTB)  
Executing agency: ASEAN Secretariat, Jakarta (Indonesia)  
PTB | Working Group: 9.32 Asia  
PTB | Project Coordinator: Andrea Ulbrich (until 04/2018); Svenja Weyrauch (since 03/2018)  
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Note: This evaluation is an independent assessment. Its contents reflect the assessor's opinion which is not necessarily equivalent to PTB's view.

**List of abbreviations**

AB	Accreditation bodies
ACCSQ	ASEAN Consultative Committee on Standards and Quality
AEC	ASEAN Economic Community
AHEEERR	ASEAN Harmonized Electrical and Electronic Equipment Regulatory Regime
APLAC	Asia Pacific Laboratory Accreditation Cooperation
ASEC	ASEAN Secretariat
ASEAN	Association of Southeast Asian Nations
ACRPPP	ASEAN Common Requirements of Pre-packaged Products
AMS	ASEAN Member States
APMP	Asia Pacific Metrology Programme
APLMF	Asia-Pacific Legal Metrology Forum
ASEAN	Association of Southeast Asian Nations
CLM	Cambodia, Laos PDR, Myanmar
GRP	Good Regulatory Practice
IAC	International Accreditation Forum
ILAC	International Laboratory Accreditation Cooperation
JSC EEE	Joint Sectoral Committee on Electrical and Electronic Equipment
MEDEA	APMP/APLMF Metrology - Enabling Developing Economies in Asia
MSME	Micro, Small and Medium Enterprises
NAFP	National Accreditation Focal Point
NAWI	Non-Automatic Weighing Instruments
OEDC DAC	Organization for Economic Development and Cooperation, Develop. Assistance Committee
PPP	Pre-Packaged Products
QuISP	Quality Infrastructure for Sustainable Development
SANAP	Promoting regional accreditation networks in the Asia-Pacific region (APLAC)
SB	Standards bodies
WG	Working Group

## 1. Project Description

The objective of the project is defined as follows: "Quality Infrastructure institutions will take into account international good practices when implementing the ASEAN Economic Blueprint in the fields in the field of standards, technical regulations, accreditation, conformity assessment and legal metrology". The project is based on ASEAN's goal to reduce non-tariff barriers to trade and thus foster intraregional trade and international competitiveness. The project was expected to make a significant contribution to the ASEAN economic integration and single market and production base and to assist ASEAN in its endeavors for regional harmonization as stated in the AEC Blueprint, Articles 14 and 19 under Section A1, the Free Flow of Goods.

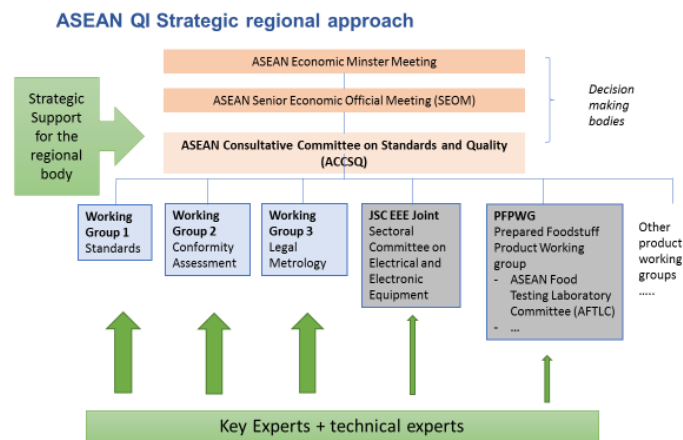
Four outcome indicators are set to measure the objective:

1. To fulfil the AEC deliverables, the ASEAN Consultative Committee for Standard and Quality (ACCSQ) or its related bodies adopt at least two recommendations for the regional harmonization of legal metrology in accordance to international best practices.
2. At least 6 measures for the national implementation of ASEAN-wide harmonized standards or technical regulations will be implemented with project support in at least four out of ten ASEAN Member States.
3. In three out of four CLMV countries, at least one new or extended service will be provided in a QI field that is relevant for regional integration.
4. At least two recommendations, pertaining to ACCSQ's regional harmonization initiatives in the fields of conformity assessment or standardization, will be elaborated with support of the project and accepted by ACCSQ or related bodies.

The political partner of is the ASEAN Secretariat (ASEC). The project cooperates mainly with two divisions of the Economic Community Department: i) Standards and Conformity Division, ii) IAI & NDG Division. On an operative level the project cooperates mainly with the regional bodies in charge of quality infrastructure issues, namely the ASEAN Consultative Committee for Standards and Conformity (ACCSQ) which consists of three horizontal working groups and eight Product Working Groups (e. g. for pharmaceutical products, rubber-based products, etc.). The project supports ACCSQ in its mandate and mission to establish comprehensive policies relating to standards, technical regulations and conformity assessment procedures (STRACAP). The main partners (stakeholders) for project implementation are the ACCSQ and its subordinated three horizontal (cross-sectoral) working groups: a) WG1: Standards, b) WG2: Conformity Assessment and Accreditation and c) WG3: Legal Metrology. Moreover, the project has cooperated with two product working groups, namely the Joint Sectoral Electrical and Electronic Equipment (JSC EEE) and the Prepared Foodstuff Product Working Group (PFPWG) and its Food Testing Laboratories Committee, (AFTLC).

The project approach addresses primarily technical issues and to a lesser degree strategic issues. Three international Key Experts provide regular consultancy to the respective ACCSQ Working Groups. Specialized trainings and seminars are provided and carried out by short term experts. In addition, the project provides support to ACCSQ in operationalizing its strategic workplan. Apart from its approach of working with the regional QI bodies the project contributes to the ASEAN objective of narrowing the development gap within ASEAN in line with the "Initiative for ASEAN Integration (IAI)". Therefore, the project has a geographic focus on selected ASEAN Member States (AMS) which are Cambodia, Lao PDR and Myanmar (in short: CLM countries) to strengthen their QI capacities.

Critical assessment of the project impact logic and indicators: Conceptually the project is cooperating closely with the existing ASEAN structures and its committees (ACCSQ and its WGs). By strengthening the capacities of these regional bodies, the project contributes to QI improvements at the regional level (e. g. agreements on harmonization of standards, dissemination of new developed guidelines, knowledge sharing, etc.). It is assumed that through ownership and political willingness these positive changes are cascading to the responsible bodies at the national level. The following chart illustrates the regional approach of the project:



In parallel CLM countries receive targeted support for institutional strengthening of their standards bodies and accreditation system and for improvements in their legal metrology systems. Through providing technical expertise and advice selected stakeholders are supported in improving their QI system. The technical support offered is both demand and supply driven. The level of ambition is high given the limited budget and time, as the project intends to achieve outcomes both at the regional level through the ASEAN bodies responsible for quality infrastructure as well as on the national level targeting national policy and regulatory bodies in the CLM countries (relevant macro and meso level institutions for strengthening Quality Infrastructures).

Experience shows that regional integration processes tend to be time and resource intensive. Technical expertise is essential for reform processes related to Quality Infrastructure and for the work of regional QI bodies but the political consensus among member states is also essential.

Beyond the regulatory framework and technical expertise, the project also targets another important area. It intends to improve the awareness of users and potential users from industry and SMEs on the benefits of the services provided by national quality infrastructure institutions and stimulate on-going interaction/dialogue among the relevant actors. The different intervention areas to achieve the objective are appropriate and viable. Project indicators on outcome and output level are defined in such a way that they guide implementation. Most of the indicators are specific and measurable.

## 2. Assessment of the project

### 2.1 Status of the change process

**Relevance:** The project approach contributes to overcoming technical barriers to trade for companies in the AMS, in particular to provide a level playing field for small and medium-sized companies. The technical support and assistance provided is closely aligned with the priorities and targets set out in the ACCSQ Strategic Plan 2016-2025. Activities are to a large extent stakeholder-driven and correspond to the needs of the involved partner institutions at national and regional level. It is a great achievement that awareness of the importance of quality assurance issues in the CLM countries could be raised through the project activities. With its state-of-the-art regional approach, it provides an important platform to address QI issues of regional concern. The project is in line with key BMZ strategies for Asia and related to trade and QI matters. The relevance of the project is rated as “good”.

**Effectiveness:** The criteria effectiveness assesses to which extent the project has achieved its objective (outcome) measured against the four outcome indicators see p.3):

**Indicator 1** relates to the support provided to **WG 3 Legal Metrology** based on a jointly developed workplan with three main work packages: i) harmonization of requirements for pre-packaged goods; ii) harmonization of legal metrology legislation and administration; iii) other training activities. Most of the activities planned were implemented. An incomplete item on the PTB-WG 3 agreed workplan is “increase competency for verification officers/inspectors”. Concerning the target of the indicator of “adopting two recommendations” the project contributed to the development of recommendations in two areas: a) the ASEAN Guidelines for Type Approval Controls (TAC) to ensure instruments fulfil requirements based on International Organization of Legal Metrology (OIML) recommendations and b) the development of a Handbook for the application of the previously agreed ASEAN Common Requirements for Pre-packaged Products. Training and strengthening regional expertise in the control of pre-packaged products for the implementation of the common requirements at the national level complemented this support provided to WG 3. Interviewees expected the TAC Guidelines to be endorsed formally by ACCSQ before the end of the project. Thus, Indicator 1 will be fully achieved.

**Indicator 2** relates to the comprehensive support provided to **WG 1 Standards** and to the **Product Working Group on Electrical/Electronic Goods** (Joint Sectoral Committee on Electrical and Electronic Equipment/JSC EEE). Collaboration with WG 1 has been based on a jointly developed workplan comprising the following main activities: General Product Safety Directive (GPSD), review of ASEAN Guide on Good Regulatory Practice (GRP), blended learning course (QuSIP) and training and coaching on good practices in developing standards in the CLM countries. Indicator 2 has very ambitious targets for a project operating at the regional level. The support for strengthening the capacities of standards bodies at the national level is widely welcomed by many interviewed partners, although the implementation at the national level is beyond the mandate of ACCSQ as the main counterpart of the project. The project has been successfully working on two measures (GRP Guide, ASEAN Harmonized Electrical and Electronic Equipment Regulatory Regime/AHEEER process) of ASEAN-wide harmonized standards or technical regulations and supported the three CLM countries in strengthening their technical work competencies on standards. The process of standards setting is not strongly linked to the production base of the respective AMS and thus, not really market driven. Overall, Indicator 2 will most likely not be achieved until the end of the project phase.

**Indicator 3** relates to the comprehensive support provided to **WG 2 Conformity Assessment and Accreditation** by the Key Expert as well as capacity development through short term experts for setting up **National Accreditation Focal Points (NAFP)**. Achievements made so far are that each supported AMS has signed an MoU with another accreditation body (AB) of an advanced AMS. CLM countries now have qualified assessors for ISO/IEC 17025 who are able to conduct assessments jointly with their partner AB. Thus, the national AB or NAFP are better prepared to offer its industry internationally recognized accreditation services. Up to now the local demand for such services is moderate. The project partners generally show a high degree of determination to develop their national accreditation bodies. Although the resources in CLM countries are clearly limited, the AB’s of the countries are in the meanwhile being perceived as

competent and trustworthy organizations increasingly more accepted by the market. The growing technical competence, the increasing implementation of quality systems and the gradual process of compliance with the ISO 17011 standard allows the CLM AB to participate more and more and with higher continuity in the conformity assessment structures of AMS. Up to the time of the evaluation the status of introducing the NAFP concept in CLM can be assessed as having achieved stage two of the five NAFP development stages defined by PTB: contact point with technical competence established. The NAFP are able to provide services within their own system jointly with their Accreditation Partners. This is an important first step of the accreditation process. Overall, Indicator 3 will most likely be fulfilled till the end of the project phase.

**Indicator 4** measures progress made given the comprehensive support provided to **WG 1 Standard** and to the **ASEAN Food Testing Laboratory Committee (AFTLC)** as part of the Prepared Foodstuff Product Working Group (PFPWG). WG 1 has been substantially supported by the Key Expert in reviewing and updating the ASEAN GRP guide through a task force aligned to the WTO agreement on TBT, OECD recommendations and ASEAN strategic papers. After several rounds of a structured revision process (a task force for revision has been set up who collected feedback to the proposed expert draft) the WG 1 has successfully completed the review process in May 2018. Many interview partners expected the revised GRP Guide to be endorsed by the upcoming 50th ACCSQ meeting in December 2018. Regarding capacity development for food testing laboratories, the AFTLC was supported through a regional Proficiency Testing (PT) to measure the AMS measurement capabilities against one another as well as a regional workshop on measurement uncertainty for heavy metal in water analysis. PTB also supported the drafting of the guideline for ASEAN Food Reference Laboratory Network in cooperation with the EU ARISE Project. The mid to long-term aim is to set up an integrated system, to harmonize food safety surveillance in ASEAN and to assure reliable food testing competencies in AMS. Overall, Indicator 4 will most likely be achieved until the end of the project phase.

Overall, three out of four outcome indicators of the project are achieved. The effectiveness of the Project is therefore rated as "good". The project has made good progress in achieving its objective to strengthen ASEAN QI institutions in accordance with international good practices. The project is on track concerning accreditation, conformity assessment and legal metrology. In the field of standards challenges remain with regard to how the overall QI landscape for the ASEAN region should look like, taking into account comparative advantages and different demand pattern among AMS. A key success factor of the project seems to revolve around the professional profile of the experts and their efficient mode of operation – a mix of technical expertise, professional experience in working with stakeholder groups and context/cultural-sensitiveness for working within the ASEAN structure.

**Impact:** The project has contributed to raising awareness about the benefits of further integration into the international QI system. It has achieved this by e.g. supporting harmonization efforts through common guidelines and benchmarking activities. Several interview partners observed a shift of preference from alignment between the countries to alignment with internationally recognized standards since the start of the project. The concerted action in CLM countries, especially in the accreditation component, narrows down the development gap in QI. It is very likely that the project has already had positive impacts on trade facilitation, consumer protection or in doing business across the border. But, at this point in time it is difficult to assess these positive effects as there are no close linkages with industry to assess the impacts. Moreover, it must be taken into account that these are long-term impacts. The support provided for establishing bilateral/trilateral cooperation's among AMS (e.g. CLM countries signed MoU with Singapore Accreditation Council, Vietnam Bureau of Accreditation, and the Thai Industrial Standards Institute) especially in the field of accreditation has had positive learning and networking effects. The ASEAN Guidelines for Type Approval has set a good example of how important such joint action is. Overall, the project is attaining higher-ranking objectives with respect to development policy and supports necessary institutional changes in the field of QI. The impact is rated as "good"

**Efficiency:** Overall, the project has used its resources adequately for relevant project activities. In line with ASEAN priorities a comparable high amount (given the regional approach of the project) has been spent for national activities in CLM countries. Coordination takes place with other development projects (BMZ funded or by other international donors) to a sufficient degree. Concerning the duration of four years a shorter period of time would have been more reasonable because some interview partners indicated that there is not much financial leeway left six months before the end of the project for unforeseen partner needs. The impact is rated as „good“

**Sustainability:** The criterion “Sustainability” assesses to what extent the positive changes and impacts of the module with regard to the objectives in terms of development policy be deemed durable. The regional guidelines produced by the project will most likely be used within the region. Some interview partners however, stressed that the dissemination and utilization of the guidelines still must be supported by the project in the next phase. WG 3 is producing guidelines that are both useful and empower those involved in their production. Support from PTB has strengthened the ability of WG 3 members to contribute and to support further development within their own economies. In general, Stakeholders show a high commitment to continue and broaden their regional cooperation regarding QI issues. It is anticipated that the positive cooperation results will be durable on an individual level. The “Train-the-Trainer” programs delivered to legal metrology enable them to train local officials and have the potential to have substantial effects. By using co-trainers from the region, the project demonstrated that there are skilled trainers within the region. The capacity development measures delivered to standards and accreditation bodies in the CLM countries address the need to train the staff of the organizations. The financial resources of the respective authorities however, as well as the legal frameworks conditions still need to be improved. Therefore, standards and accreditation bodies in the CLM countries are not yet in conditions to be fully operating counterparts for growing industrial demands in the countries. There is a common consciousness for further steps towards consumer orientation and involvement of the private sector, necessary to develop demand-driven QI services. The project operates in a complex setting of requirements in economic and political terms (fair balance of interests among AMS; different level of ownership of national stakeholders for regional issues etc.). The sustainability is rated as “satisfactory”

## 2.2 Success factors for the observed results and change processes

**Strategy:** The project pursues a two-pronged approach which builds on knowledge transfer and technical expertise: i) support to ACCSQ and its structures in its regional mandate to improve QI. In this regard the project addresses ASEAN-wide QI issues where there is a clear mandate for collective/regional action and ii) targeted approach at AMS level (national perspective) to help the CLM overcome the development gap of different level of capacities of their QI institutions. With the perspective of knowledge sharing and peer learning within ASEAN the project activates relevant partners in the underlying understanding of the idea “ASEAN helps ASEAN”. The pursued strategy is logic and comprehensive as it is a mix of a broad range of intervention packages and cooperation partners which provides flexibility and room to adjust if necessary given the political sensitive working set-up between ASEAN and its structures and AMS interest. Level of achievement: 70 % (average score)

**Cooperation:** From the public partner side of a functioning QI the project is working with the right stakeholders. Although the project has improved its outreach to the private sector through the awareness raising events the project is lacking involvement of partners from the industry-side (e.g. business membership organizations, etc.). The project partners are clearly defined, but regarding the partners in the CLM countries it is not sufficiently clear who has to learn what and at which level to strengthen their capacities. The scope of the projects responsibility is not sufficiently clearly defined as it unintendedly generates expectations of increasing technical support (including equipment) at national level which are unlikely to be met due the nature of the project (regional approach) and its limited resources. The involved stakeholders at regional level (ASEC) are aware of their responsibilities and have a general understanding of the project cooperation culture and communication structure. Partners from CLM are more focused on the national level activities. More attention should be paid to the possible line of conflicting interests between regional outreach and in-depth structural changes at AMS institutional level (e.g. in the CLM countries). Level of achievement: 88 % (average score)

**Steering:** The steering and management structure is outlined in the implementation agreement and has been built on existing ASEAN structures. Two project coordinators oversee the three working groups. Key strategic and political steering takes place during the “dialogue sessions” in conjunction with the regular ACCSQ meetings. Every year such a “dialogue session” takes place between PTB (project coordinator responsible for ACCSQ, PWG, WG 1 + WG 2) and ACCSQ (supported by the Senior Officer of the Trade Facilitation Division of the ASEC) to discuss policy, coordination, planning and implementation issues related to the project. This consultation process with ACCSQ has proved to be effective for flow of information about progress made, discussing the provision of expertise and technical assistance and if necessary amendment of the ASEAN-PTB Work Plans, depending on current requirements of ACCSQ and its related WGs. Inputs generated by the discussion in the WGs have contributed valuable impulses to achieving the objectives of the project. Regular meetings between the project coordinator in charge of overall coordination issues have also taken place with ASEC. Regular updates of the WGs’ Workplans were done at the WG-PTB dialogue sessions. Level of achievement: 70 % (average score).

**Processes:** There is a general understanding about the different processes that are of relevance for a successful implementation of the project. The on-going processes in the context of the project are known (e. g. ASEC annual planning and reporting process) but there has not been an explicit analysis of what kind of processes concerning the consultation and decision-making processes within the ASEAN structures are relevant (e. g. for handing over the approved GRP Guide and necessary next steps at regional and national level). Efficient processes relating to performance and steering have been set up. Interview partners reiterated that the formal communication flow (according to the protocol) among involved partners from the CLM countries is key for a successful implementation. Level of achievement: 65 % (average score).

**Learning and innovation:** The project has regularly adjusted its operational planning for each WG and partners in the CLM countries to new requirements by partners and adapted to changes of the framework conditions. A systematic after-training feed-back mechanism is in place to assess each training regarding content, training method (theory, practical parts, group work, etc.) and organizational issues. However, there is no aggregated data of all trainings and their assessment results. A structured exchange among all involved international (key) experts and the project coordinators would also be an important source of learning and innovation for steering the project. There is no explicit learning mechanism in place yet for reflecting on overall project implementation. Level of achievement: 60 % (average score).

#### 4. Recommendations

The recommendations refer to the entire project cycle. Unless explicitly stated the priority of the recommendations are equally high.

- Part of the selection process of training participants from AMS should be based on a training needs assessment prior to the training course. Results of this assessment should be provided to the trainer in due course in advance of preparing the training course.
- A mechanism for knowledge sharing of trained staff with their colleagues (cascading of knowledge) should be institutionalized by each partner institution involved in training measures.
- Partner institutions who are responsible for selecting qualified participants should ensure that selection of staff is based on criteria that match the basis requirements of the training course (e. g. technical qualifications; English communication skills).
- It is recommended to define partner contributions and strengthen ownership, in particular for the support provided to CLM countries for main activities (e.g. signing of a MoU).
- In the spirit of “ASEAN helps ASEAN” partners should be more encouraged to propose regional experts to be involved in training, consultancy and exposure trips.
- Regarding the steering structure the regular ACCSQ-PTB Dialogue Meetings should be continued. Regular exchange between the PTB project coordinator and with the Senior Officer at the ASEC should be intensified (e.g. visits, regular skype calls); this also applies to exchange with the key experts and among all key experts (e.g. joint meetings in Germany).



- The issue of confidentiality of WGs and ACCSQ meetings is a key feature of the cooperation culture of the partner side. The approach practiced building trustful relationships and getting sufficient information through workshops and dialogues should be continued. The same applies to the issue of the planning perspective where partner's interest remains higher on concrete activities than on strategic planning measures. The "hands-on approach" and the professional expertise provided by PTB is highly appreciated by partners. For both issues long-term perspective is necessary to see incremental changes happening.
- For supporting strategic planning at ACCSQ level it is recommended to further explore the possibility of providing ACCSQ also with an international key expert.
- Define indicators in line with intended outcomes of each WG and ACCSQ to develop a common understanding of project targets and shared responsibility for project implementation.
- More effort is needed to design and regular update the monitoring system aligned to the result matrix and focused on results and impact and less on activities.
- Increase interaction between ASEAN and APLMF to ensure MEDEA program is complimentary to ASEAN requirements, e.g. ASEAN WG 3 Chair provide reports to each APLMF meeting.
- Deploy more ASEAN based QI experts and couple them for joint missions with international experts.
- Support formats and mechanism to increase exchange among involved project staff (e. g. international short-term experts for the WGs, AFTLC and support provided to CLM countries) to make better use of experiences made in cooperating with the different partners (ASEC, ACCSQ, WGs, etc.). For example, a yearly joint meeting of all key experts at the PTB headquarter should be organized for reflection and learning.
- Although there seems to be no pressing efficiency issue with having two project coordinators it is recommended to hand the steering into the hand of one project coordinator being in charge ("one face to the customer"), to intensify the communication with ASEC and increase visibility of PTB.
- For coordination with other projects of other donors a formal meeting with respective representatives should be organized at least once a year during the visit of the project coordinator at ASEC.
- Further analysis is needed of how stakeholders from the private sector can be better involved as leverage for improving the QI infrastructure.
- Given the limited project budget it is recommended to narrow down the scope of capacity development for CLM countries as the level of capacity and prerequisite for effective measures (e.g. staff, budget, laws and regulations) are very different among the three CLM countries. Thus, a stronger focus on two countries is recommended (e.g. target value to focus on 2 of the CLM countries).
- The role of the project officer (administrative support staff) at the ASEC as a crucial liaison person and facilitator of the Working Group meetings should be strengthened to increase visibility of PTBs efforts at ASEC level and to intensify cooperation with other ASEAN dialogue partners. It is recommended to provide further training as a staff development measure to increase the technical knowledge of the project officer.
- As the training is conducted mostly in English it is recommended to provide some technical English language courses for the participants from the CLM countries to increase effectiveness of training.

#### Specific Recommendations by intervention area:

- Harmonization of standards
  - Support the dissemination of the GRP Guide in AMS by showcasing the promotion of implementation at national level in one AMS and to present this as a best case to the ACCSQ structures.
  - Develop a CLM handbook for harmonization of standards in collaborating with committees which take care of this (e. g. committee on developing economies under PASC or ISO DEVCO).
  - Review the relation of regional and national adopted standards to the ISO / IEC context.
- Conformity assessment and accreditation
  - Continue with NAFP concept in CLM countries.

- Add focus on user relations and conformity and accreditation bodies, according to market needs and partner capacities.
- The provision of a series of marketing/awareness workshops, and the development of plans for support to National Quality Forums should be continued. But awareness activities should be combined with guided action (e. g. concrete examples of how that links to each economy).
- AFTLC
  - Jointly define with AFTCL a narrow scope on further support (focus on issues for improvement being within the purview of laboratories).
- Capacity development for national standards/accreditation bodies of CLM countries
  - Continue support for CLM countries based on ownership, progress made and partner contributions. Define realistic targets to be met given the limited resources of the regional project.
  - CMLs are partnered with more developed developing economies to support them as they work towards implementation. There is a win-win particularly when the developing economies provide trainers as they also develop their confidence as their expertise is recognized.
  - Support the introduction of a market surveillance project which would assess the degree of uptake and implementation of the concepts in everyday practice.
- Legal Metrology
  - Continue support for strengthening trainers from ASEAN economies who will train and support implementation within ASEAN. More emphasis on ensuring these people are used and supported.
  - Conduct a follow-up study on the implementation of NAWI type approval guidelines and pre-packaged products common requirements to determine a) if they have been formally adopted; b) to what degree they have been implemented; and c) to identify the level of consistency throughout ASEAN economies.
  - Conduct a market surveillance project for NAWI to assess the degree of non-compliance that exist in each economy.
  - Develop a guideline document for type approval of fuel dispensers.
  - Identify the competencies required by verification officers.

## Annex: Evaluation Design

The evaluation took place from the 4<sup>th</sup> of June until 23<sup>rd</sup> of June. Based on a desk study of relevant project data (see chapter 4.2), Skype/telephone interviews were conducted. The field mission took place from 18<sup>th</sup> to 23<sup>rd</sup> of June and started with stakeholder interviews in Myanmar and Cambodia on 18<sup>th</sup> and 19<sup>th</sup> followed by interviews with representatives of the WG on Legal Metrology (WG 3) parallel to its regular meeting from 20<sup>th</sup> to the 22<sup>nd</sup> of June in Phnom Penh (Cambodia). The evaluation team conducted a joint analysis and assessment of the evaluation results on the 23<sup>rd</sup> of June.

PTB evaluations are in line with the standards set by the German Society for Evaluation (*DEGEVAL Deutsche Gesellschaft für Evaluierung*) focusing on four basic attributes: utility, feasibility, propriety and accuracy. The project was evaluated and assessed according to the internationally accepted evaluation criteria of the *Development Assistance Committee (DAC)* of the *Organization for Economic Co-operation and Development OECD*: For each criterion the PTB has defined the following specific subcategories (assessment aspects):

OECD-DAC Criterion	PTB assessment aspects
Relevance	Solving the target group's core problem
	Agreement of the objective with strategies of the partner country
	Agreement of the objective with BMZ strategies
	Topicality of the fundamental orientation and concept with respect to development policy
Effectiveness	Quality and requirements of the results matrix
	Objective achievement of the module
Impact	Attaining higher-ranking objectives with respect to development policy
	Exemplarity, creation of structures and/or broad impact of the module
Efficiency	Adequacy of the resources used
	Coordination with other donors/projects
	Adequacy of the period of time
Sustainability	Durability of the positive impacts
	Taking account of risks that have a negative influence on sustainability

The following specific evaluation questions were identified:

- In ASEAN's complex internal governance structure based on Working Group and ACCSQ meetings, and given the highly political nature of these meetings, what recommendations can be made for an effective steering structure without generating further meetings?
- Given the confidentiality of WG and ACCSQ meetings: what recommendations can be made to shape technical support processes given the limited access to information?
- How can the project handle partners' interest in activities rather than strategic planning?
- How can the implementation of ASEAN regional guidelines be enhanced at national level? What is being done by ACCSQ and the WGs to promote the implementation of the guidelines?

In addition, the evaluation also determined the causes and factors for observed results and change processes according to the management model of Capacity WORKS of the German technical cooperation (strategy; cooperation; steering structure; processes; learning and innovation).

**Data sources and data quality:** For the evaluation two types of sources of data were examined:

- Firstly, a wide variety of relevant documents covering project design (project proposal), monitoring data, operational planning/work plans, progress and mission reports, results of the feedback questionnaire of the trainings – among others.
- Secondly, telephone/Skype interviews and face-to-face consultations with a wide range of stakeholders from selected AMS, using “semi-structured interviews” with a key set of questions in a conversational format. The questions asked aimed to provide evidence regarding the evaluation criteria. Triangulation of results, i.e. comparing information from different sources, such as documentation and interviews, or interviews on the same subject with different stakeholders, were used to corroborate or check the reliability of evidence.

Since it was not possible, in the limited time available for this evaluation, to meet all the stakeholders involved in the wide range of the project activities, some sampling of all relevant partners was required. Cambodia and Myanmar were selected due to the special support they received for on-site visits and to conduct interviews with relevant stakeholders from both countries. In addition, representatives from the Working Group 3 and the Key Expert for Working Group 3 were interviewed during its regular meeting in Phnom Penh from 20<sup>th</sup> until 22<sup>nd</sup> of June 2018.

The skype and/or telephone interviews with selected partners were conducted one week before the on-site-visit (from Monday the 4<sup>th</sup> until Friday the 8<sup>th</sup> of June 2018). The lead evaluator interviewed partners from the ASEAN Secretariat, from Laos PDR and Myanmar, representatives of other PTB projects and development projects whom the project is working with, the key experts for the WG 1+2 the international expert supporting AFTLC and the international expert responsible for capacity development measures for the CLM countries and selected regional/international experts (see list of interview partners in the Annex). Most of the skype/telephone interviews went according to the schedule and only some minor technical and communication challenges were encountered.

Quality of the monitoring system: For evaluation purpose various excel sheets<sup>1</sup> for monitoring were provided by the project team as well as numerous activity lists and reports. The structure of the matrices is suitable for the monitoring purpose; however, the matrices are not up-to-date and appear not to be filled in a systematic and regular manner. Moreover, the PTB liaison person also provided up-dated matrices for the WG1-3 “Monitoring Matrix for PTB” which related to the individual Work Plan of the WGs but not to the objective and indicators. As such there seems to be no centralized overall result-based monitoring system for decision-making and steering of the project which is managed by the project coordinators. Monitoring of the various activities and measures implemented is done on a regular and structured way by comprehensive and informative reports, after-training feedback questionnaires (to learn about the quality of the training whether it has been of value to the participants). In some cases, also post workshop follow-up questionnaire were used to learn more about the benefits of the training for the working context of the participants. The review results of each training have been used by project coordinator and the trainer for improving the training. There seems to be no mechanism at project coordination level to do an overall review of the trainings and technical support provided by regional and/or international experts and to discuss results with partners for knowledge management, learning processes and steering of the project. To sum up, the quality of the monitoring data regarding results is not sufficient regarding information on outcome level. However, the comprehensive monitoring of activities/outputs informs partners about the progress, status and development of the project. Most of the interview partners had difficulties to describe clearly the connection between the activities/outputs and the results (objective indicators) of the project concept.

**Annex: Interview partners: Skype/telephone interviews conducted 4<sup>th</sup> until the 8<sup>th</sup> of June 2018**

Institution	Name	Function
ASEAN Secretariat Market Integration Directorate, ASEAN Economic Community Department	Ms. Sylvia Laksmi Sardy	Senior Officer, Standards and Conformance Division ( <b>WG 2 and contact point PTB</b> )
	Mr Isagani C. Erni	Senior Officer, Standards and Conformance Trade and Facilitation Division, ( <b>WG 3</b> )
	Mr. Lim Tuan Chee	Assistant Director/Head of Standards & Conformance Division ( <b>ADR and WG 1</b> )
German Development Cooperation: Bi- and regional TC projects	Ms Sita Zimpel	Competition Policy and Law in ASEAN (CPL), Principal Advisor, Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)
	Mr Till Ahnert	Principal Advisor; Standards in the South East Asian Food Trade (SAFT), GIZ
Representatives of other relevant donor projects	Mr Paul Mandl	EU ARISE
	Mr Raj Rajinder Sud	EU ARISE
WG 1	Mr Ridzwan Kasim	Former Chair of ACCSQ Working Group on Standards (WG 1) Senior Director of Standards Malaysia
	Mrs Norhaliza Arifin	Current Chair of WG 1; Senior Principal Assistant Director (Standardization), Department of Standards Malaysia
WG 2	Mr Mohammad Hamzaini	Former Chair of ACCSQ Working Group on Conformity Assessment (WG 2); Principal assistant director at Standards Malaysia
	Mr Roslee Saad	Current Chair of WG 2 Principal Assistant Director of Standards Malaysia
	Ms Bussaba Sae-Lim,	Co-chair of WG 2; Head of CB Accreditation Group, Office of the National Standardization Council, Thai Industrial Standards Institute (TISI), Ministry of Industry, Thailand
WG 3	Dr Wan Abd Malik Wan Mohamed	Former Chair of ACCSQ Working Group on Legal Metrology (WG 3), Malaysia
	Mr Abdul Rahman Mohamed	Chair of WG 3; Deputy Director, Flow Group, National Metrology Institute of Malaysia, SIRIM Berhad
	Mr Khlaut Ousa	Co-Chair of WG3, Director Department of Legal Metrology, National Metrology Center, Cambodia
Technical Experts	Alex Inklaar	PTB Key Expert to WG 1
	Graham Talbot	PTB Key Expert to WG2
	Peter Mason	PTB Key Expert to WG3,
	Mr Yannapat Uthongsap	PTB consultant for Accreditation in for Cambodia
	Hans Peter Ischi	PTB consultant for Accreditation in CLM
	Klaus Helmboldt	PTB Consultant for pre-packaged goods, former verification officer (Legal metrology) (WG 3)
	Dr Clemens Sanetra	PTB consultant (to AFTLC)
	Manfred Kochsiek	PTB Consultant (former PTB Vice President) on legal metrology (WG 3)
Cambodia	Mr Sengkong Chhrien	Director of the Department of Accreditation
	Mr Chan Sopha	Standardization
Myanmar	War Moe	Standardization

	Zar Ni Aung	Director
	Ms Lei Win	Head of Accreditation since 2018
	Ms Cho Lwin	Until 2018 Head of Accreditation
<b>Lao PDR</b>	Mr Bounhome Phanouvong	Deputy Director of Quality Center, Ministry of Science and Technology; Department Standardization and Metrology
	Ms Nisith Khammounheuang	Deputy Director General, Department of Standardization and Metrology, Ministry of Science and Technology
	Mr Boudsakone Luanglath	Technical Officer who co-organized PPG training in Laos in 2017 (legal metrology) Department of Standardization and Metrology
<b>Thailand</b>	Mr Chartree Areewong	Director of Bureau of Weighing Instrument Supervision, Department of Internal Trade, Ministry of Commerce (legal metrology, TAC guidelines, PPG)
<b>Singapore</b>	Mr Andrew Yap	Manager, SPRING Singapore (legal metrology, TAC Guidelines)
<b>Philippines</b>	Mr. Michael Jason Solis	National Metrology Lab, Industry Technology Development Institute, DOST (legal metrology)
<b>AFTLC</b>	Dr Panadda (Ms)	Deputy Director; National Institute of Metrology (Thailand)
<b>PTB Project staff</b>	Andrea Ulbrich	Until March 2018: Project Coordinator WG 1 + 2, AFTLC, ACCSQ
	Stefanie Reichertz	Project Coordinator, WG 3
	Svenja Weyrauch	Starting April 2018: Project Coordinator, WG 1 + 2, AFTLC, ACCSQ, bilat: Myanmar
	Galih Rizki	PTB Project Officer at ASEC, Jakarta
<b>Other PTB projects in the region</b>	Sabine Greiner	Project Coordinator, MEDEA (Metrology-Enabling Developing Economies in Asia)
	Nitja Rehani	Project Coordinator, SANAP (Strengthening Accreditation Networks in Asia-Pacific),

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