

REPORT FOR TRAINING COURSE ON PREPACKAGE GOODS

Dates: 18/5/2015 to 22/5/2015

Venue: Holiday Inn Hotel Bandung

Host: Indonesia – Directorate of Metrology

Trainers: Kevin Gudmundsson & Ben Aitken

1. Objective of the Training

Course Objective:

The training course will provide participants with the skills and knowledge necessary to carry out the inspection of pre-packaged products using the AQS and internationally accepted labelling requirements. Participants will be encouraged and provided with the resources to enable them to apply what they have learnt on this course when they return to their respective economies.

The training is primarily focused on the practical application of AQS through the presentation of the International Organisation of Legal Metrology's (OIML) international requirements in both classroom style learning and through practical exercises. We will cover OIML International Recommendations R79 *Labelling requirements for prepackaged products* and R87 *Quantity of product in prepackages*. The training will include the process required to conduct a reference test, good regulatory practice, issues to be considered when conducting a reference test, practical exercises and an onsite demonstration.

The intent of this training is to help improve and harmonise metrology capability in the Asia-Pacific region and facilitate trade development through the removal of technical barriers.

2. Target Group

The target group for this training course was for participants:

- To be from developing economies within Asia
- To have experience in the area of pre-packaged products
- To be Able to introduce learnings from this course in their organisation
- To have a willingness to train others within their economy or within the framework of future APLMF courses

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3. Description of the Training Course

A Project titled ‘Metrology – Enabling Developing Economies in Asia’ (MEDEA), is being coordinated by the ‘Asia Pacific Legal Metrology Forum’ (APLMF) and the ‘Asia Pacific Metrology Programme’ (APMP) with sponsorship from ‘Physikalisch-Technische Bundesanstalt’ (PTB) in Germany. The objective of the project is *“The ability of the regional metrology specialist networks in Asia to promote the metrological systems of developing economies has improved”*. The MEDEA project consists of eleven training courses that will be provided over a three year period. The first training course; on pre-package goods, took place between the 18th to the 22nd May 2015.

The training venue was in Bandung, which is a four hour shuttle east from Jakarta. The trainers arrived a day in advance of the first training session, which allowed an opportunity to collect product samples from the local supermarket that would be used during the training. This also allowed the trainers the opportunity to meet members of the host economy that were there to provide support and assistance where necessary and to ensure the IT support in the meeting room was functional.

During registration each participant was provided a course folder that included all relevant material that was to be referenced during the course and an envelope containing their daily allowance.

The training course was formally opened by the Indonesian Ministry of Trade, Directorate of Metrology, Priyo Syamsul N. and the APLMF Secretariat GUO Su.

Following introductions and an icebreaker, a spokesperson from each economy provided a presentation on how prepackage goods are controlled in their economy. Presentations were provided by Bangladesh, China, Indonesia, Malaysia, Mongolia, Myanmar, New Zealand, Papua New Guinea, Philippines, Sri Lanka, Uzbekistan and Vietnam.

The training for the remainder of the first day focused on the requirements of OIML R79, which details the labelling requirements for prepackages, and misleading packages. The delivery of the training material included two Quizzes; where the participants put the requirements of OIML R79 into practice. The participants all performed well and appeared to be well engaged and enthusiastic.

The second days training focused on OIML R87. This document provides detail on how to determine the quantity of products in prepackages and whether a batch of products complies with the average and individual quantity requirements. Initial focus was on products with a stated quantity in mass. A working example (500g packaged rice) was used as the relevant reference exercise which enabled all the sections of the days training; included equipment and traceability, random sampling, metrological controls and testing to be clearly demonstrated.

The afternoon session included preparing for the onsite visit to a ‘Nestle’ factory on the morning of third day. This provided an opportunity for the participants to practise using the bespoke computer software that would be utilised when completing the average quantity inspection.

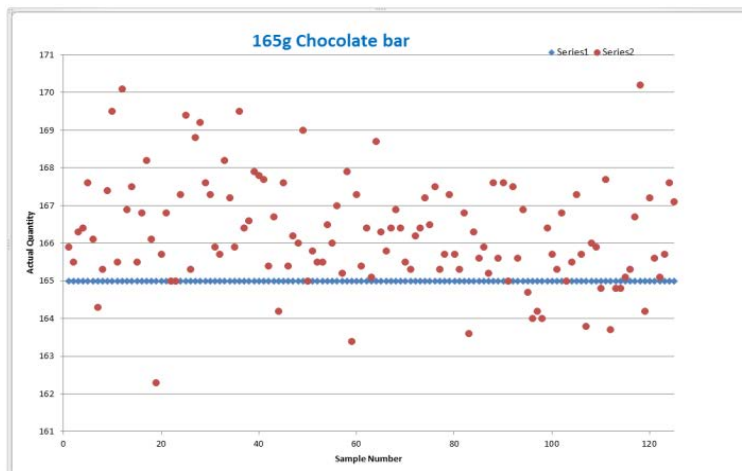
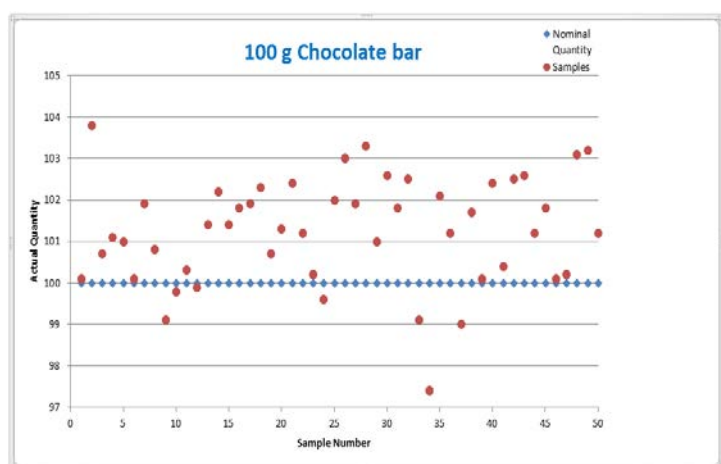
Also included in the afternoon session were a number of short training sessions on the specific requirements of; hygroscopic products, goods sold by length area or count as well as guidance on providing advice to manufacturers on due diligence and dealing with non-compliant batches.

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The morning of third day started with all attendees of the training course, including the host economy assistants, taking a 40minute bus ride through Bandung to a ‘Nestle’ factory. Here the attendees (already split into two groups) would carry out an ‘average quantity inspection’ on two different bars of chocolate (100g & 165g). All participants were assigned different tasks and the trainers set the scene introducing and element of competition between the two groups which generated additional excitement and interest into the exercise. A tour of the Nestle factory was provided following the products through the manufacturing process from blending of the raw materials to final quality and quantity control checks.

Many participants had not visited a manufacturing site before this, so the onsite visit provided a good opportunity to apply what they had learned in the classroom to a real life example.

Following the completion of both ‘average quantity inspections’, analysis of the results was completed in the hotel meeting room. This revealed that both chocolate bars successfully met the OIML R87 average and individual requirements.



Following a late lunch, training recommenced and was centred on products sold by volume, which included the varying methods of determining the actual contents of goods sold by volume. These consisted of direct comparison (volumetric and template), displacement using Archimedes principle for testing products such as ice cream (video) and density determination that was in line with OIML G14 document. The session comprised of practical demonstrations on how to determine density and the opportunity was provided for participants to practise the methods where possible; these included, electronic density meters, Hydrometers, Pycnometers and the ‘container filled with water to the brim’ method.

One of the highlights from this exercise was that the trainers had purchased containers of mayonnaise that was manufactured in Indonesia for the demonstration. When this product was tested, it was found to be deficient of its stated volume. The participants, especially the individuals from the host economy, were extremely excited about this discovery.

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The training provided on the final day was focused on test procedures for specific product types. Namely products that were packed in a liquid medium and declared a drained weight statement, frozen fruit and vegetables, glazed seafood and frozen seafood, crab meat and aerosols. The detailed test procedures and background information were delivered as provided by OIML R87. The trainers had also produced training videos to demonstrate the testing for each of the four product types to enhance the participants understanding of the test method.

The closing ceremony took place with the Directorate of Metrology, Priyo Syamsul N, returning to provide a closing speech. All participants in the training course were provided a certificate of completion.

Initial verbal feedback following the training course was very positive from all the participants. Formal Feedback Forms and Action Plans were supplied to the APLMF Secretariat from each of the participants which re-confirmed the initial feedback.

4. Highlights/ Lessons Learned

All planned activities and subjects that were detailed above were successfully completed.

The group consisted of a variety of positions and levels of experience and understanding. All candidates participated well and were very willing to be involved in the group exercises.

There were two highlights

- The onsite visit to the Nestle manufacturing site was extremely beneficial as participants were apply the knowledge and put into practice the information learned during the classroom. The outcome of the onsite visit was not only positive for the participants, but also the manufacturer who was advised that both products tested (100 g and 165 g chocolate bars) passed.
- The density determination exercise where the participants had the opportunity to be involved in determining the density of four products using different methods. The highlight was that the trainers had purchased a product to test that was actually deficient. The participants, especially from the host economy, could visually see the benefits of preforming product testing, which is to ensure consumers receive a fair and accurate measurement. The participants from the host economy said they would follow up the non-complying product with a full compliance inspection.

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Overall, the feedback was very positive. I note the following comments from participants on how future training course on prepackage goods can be improved

- **“explanation about testing to determine prepackaged product such as aerosol, drained weight, and frozen product”** I suspect that the participant had completed this feedback form on Day 3, as this was covered in detail on Day 4.
- **“More product variety during hands-on activities and more hands-on practices”** Time restrictions. An additional day would have allowed for more hands on testing of different products.
- **“Should have more site visits. They help participants understand and remember easily”**. Time restraints – alot of information to get through in four days.
- **“need more hands-on or practical in the training course”** Time restraints – alot of information to get through in four days.
- **“The content of the training is clear and was well presented. The only issue is that, is it possible to increase the training days.”**

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Recommendations to the MEDEA Coordination Committee and other trainers

- The trainers would recommend that the host economy to nominate only one point of contact during the preparation for the course. The trainers were in contact with three persons. Although all materials and equipment was available on arrival, we suggest only one contact would have been easier.
- In the nomination form, detail any equipment to bring to the course or provide pre course readings. The trainers had sent an email to all participants proving pre-course reading and a list of items to bring. Many had not received this.

5. Next Steps/ Follow-up

- Trainers contact details was provided to all participants if they would like to contact us for further information.
- Participants to complete the points detailed on their action plans.
- Trainers are available to support future training programs

6. Photographs from the training



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Appendix 1 Program

Training Course on Pre-packaged Goods

18 to 22 May 2015 in Bandung, Indonesia

Monday 18 May Venue: Holiday Inn Bandung

Time	Details	Presenter
08:30 – 09:00	Registration	
09:00 – 09:40	Welcoming address from the host economy Welcoming address from the Local Government Opening ceremony (APLMF Secretariat) Group photo taking	APLMF and Host
09:40 – 10:00	Introduction	APLMF and Host
10:00 – 10:45	Overview of the course Presentation by each economy on the system they use to control prepackages products.	Trainers and a participant from each economy

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10:45 – 11:15	Coffee Break	
11:15 – 12:30	Continued - Presentation by each economy on the system they use to control prepackaged products	Trainers and a participant from each economy
12:30 – 14:00	Lunch break	
14:00 – 15:30	Review OIML R79 - Labelling requirements for prepackaged products <ul style="list-style-type: none"> • Scope • Terminology • Metrological requirements for a prepackage • Group exercise 	Trainers
15:30 – 16:00	Coffee break	
16:30 – 17:00	Continued - Review OIML R79 - Labelling requirements for prepackaged products	Trainers
16:30 – 17:00	Summary of days training and review exercise. Participants to identify key points to implement as part of their Action Plan.	All
18:00 – 20:00	Dinner	

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Tuesday 19 May

Venue: Holiday Inn Bandung

Time	Details	Presenter
9:00 – 10:30	<p>The metrological requirements for prepackage goods as detailed in OIML R87. This section will include:</p> <ul style="list-style-type: none"> • Terminology • Three packers rules • Random Sampling techniques - a Statistical Based Method • Determining Tare • Required equipment • Traceability • Data capture manually and using electronic devices • Completing reference tests for products packed by weight • Completing reference tests for products packed by volume • Group exercises 	Trainers
10:30 – 11:00	Coffee Break	
11:00 – 12:30	Continued - OIML R87	Trainers
12:30 – 14:00	Lunch	
14:00 – 15:30	Continued - OIML R87	Trainers
15:30 – 16:00	Coffee Break	
16:00 – 16:30	Continued - OIML R87	Trainers
16:30 – 17:00	Summary of days training and review exercise. Participants to identify key points to implement as part of their Action Plan.	All
18:00 – 20:00	Dinner	

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Wednesday 20 May

Venue: Holiday Inn Bandung / Site Visit

Time	Details	Presenter
9:00 – 10:30	Continued - OIML R87	Trainers
10:30 – 11:00	Coffee Break	
11:00 – 12:30	Prepare for site visit	Trainers
12:30 – 14:00	Lunch	
14:00 – 15:30	Site visit: (To be confirmed) – visit to local pre-package production factory to demonstrate how inspection activities are undertaken in practice.	Trainers
15:30 – 16:00	Coffee Break	
16:00 – 17:00	Site visit	Trainers
18:00 – 20:00	Dinner	

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Thursday 21 May Venue: Holiday Inn Bandung

Time	Details	Presenter
9:00 – 10:30	<p>Review of site visit:</p> <p>Providing general advice to packers as a regulator:</p> <ul style="list-style-type: none"> • Labelling • Equipment • Goods that lose weight and volume due to moisture loss • Demonstrating legal compliance and exercising due-diligence <p>What to do when you have a non-compliant batch</p>	Trainers
10:30 – 11:00	Coffee Break	
11:00 – 12:30	<p>Determining the quantity of drained products packed in a liquid medium</p> <p>Determining the actual quantity of frozen (glazed) products</p> <p>Group exercises</p>	Trainers
12:30 – 14:00	Lunch	
14:00 – 15:30	Participants to finalise an Action Plan on how they will implement the lessons learnt from the training course	All
15:30 – 16:00	Coffee Break	
16:00 – 17:00	Participants from each economy to present an overview of their Action Plans on how to implement the lessons learnt into their economy	All
18:00 – 20:00	Closing Ceremony	
9:00 – 10:30	Dinner	

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Appendix 2 List of Participant

Final List of Participants			MEDEA Training Course on Prepackaged Goods (Bandung/Indonesia, 18-21 May 2015)				
No.	Title	Position	Last Name	First Name	Institute	Economy	Email
1	Mr.	Senior Examiner (Metrology)	Mamun	Mohammad Abdullah Al	Bangladesh Standards and Testing Institution	Bangladesh	mamun.bsti@yahoo.com
2	Mr.	Inspector (Metrology)	Hossain	Mohammad Liakat	Bangladesh Standards and Testing Institution	Bangladesh	liakatbsti@yahoo.com
3	Mrs.	Official	YanKun	Lu	General Administration of Quality Supervision, Ministry of Trade	China	Luyk@aqsiq.gov.cn
4	Mrs.	Section Chief Supervision of Prepacked Products and SI	Caalliandra	Nona Martin	Ministry of Trade	Indonesia	nonaniez7@gmail.com
5	Mr.	Measuring and Inspector Officer	Rediana	Rudi	Ministry of Trade	Indonesia	groody82@yahoo.com
6	Mrs.	Metrologist	Amizam	Suhaidah	SIRIM BERHARD	Malaysia	suhaidah@sirim.my
7	Mr.	Senior Inspector	Purev	Tseren Ochir	Mongolian Agency for Standardization and Metrology	Mongolei	tsochir2002@yahoo.com
8	Mr.	Metrological Inspector	Davaa	Dambasuren	Mongolian Agency for Standardization and Metrology	Mongolei	dambaa@masm.gov.mn
9	Mr.	Principal Scientist	Tint	Win	Department of Research and Innovation, Ministry of Science	Myanmar	wintutumar@gmail.com
10	Dr.	Deputy Director	Win	Mar Lar	Department of Research and Innovation, Ministry of Science	Myanmar	marlarwin99@gmail.com
12	Ms.	Investigations Officer-Product Safety	Gumbira	Tracy	Independent Consumer and Competition Commission	Papua-Neuguinea	tgumbira@iccc.gov.pg
13	Mr.	Senior Science Research Specialist	Solis	Michael Jason	National Metrology Laboratory - Industrial Technology	Philippines	miasolis@yahoo.com
14	Mr.	Senior Research Specialist	Ordona	Aries	National Metrology Laboratory - Industrial Technology	Philippines	radiance2056@yahoo.com
15	Mr.	Inspector of Measurement, Services and Devices	Wimalasena	Peellalage	Measurement Units, Standards and	Sri Lanka	silva.shanika@gmail.com
16	Mr.	Inspector of Measurement, Services and Devices	Jayasinghe	Wagage Waga Senevi	Measurement Units, Standards and	Sri Lanka	silva.shanika@gmail.com
17	Mr.	Leading Specialist	Khayrullaev	Makhmud	SE "Center for rendering metrological services"	Uzbekistan	mahmudxayrullayev@gmail.com
18	Mr.	Consultant on Metrology	Djalilov	Marufjon	Uzbek Agency for standardization, metrology	Uzbekistan	export@standart.uz
19	Mrs.	Government Official	Phan Thi Bich	Hanh	Directorate for Standards, Metrology and	Viet Nam	bichhanh@tcvn.gov.vn
20	Mr.	Director of Training Center (under STAMEQ)	Phan Minh	Hai	Directorate for Standards, Metrology and	Viet Nam	haiqtc@gmail.com
21	Mr.	Trainer	Aitken	Benjamin		New Zealand	Ben.Aitken@mbie.govt.nz
22	Mr.	Trainer	Gudmundsson	Kevin		New Zealand	Kevin.Gudmundsson@mca.govt.nz
23	Mr.	APLMF Secretariat	Guo	Su		China	aplmfsec@163.com