



ASIA-PACIFIC
LEGAL METROLOGY FORUM

How to develop an eLearning Module

Guide 8

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Overview

This document provides guidance for Working Group (WG) members as they develop materials for an eLearning module. Templates are provided to assist you as you develop your module. The purpose of each template is explained in its introduction. The content templates outline the format required to submit content to both reviewers and the developer. There are also a series of templates for use during the review process. Once the final approval stage has been reached then a series of completed templates will be sent to the developer. Think of the templates as the building blocks of the module.

The WG Chair is responsible for managing the project and ensuring that WG members complete the various templates as the project develops. Copies of completed templates should be made available in the WGs document sharing system. The WG Chair is also responsible for ensuring the WG members provide their input when required and as agreed in the governance template.

The look and feel of the modules will be similar to the New Zealand module and should be viewed by the WG before they start to develop their module. Access these by logging onto:

URL: <https://learning.tradingstandards.govt.nz>
Username: tradingstandards@mbie.govt.nz
Password: Trading01

Each module contains:

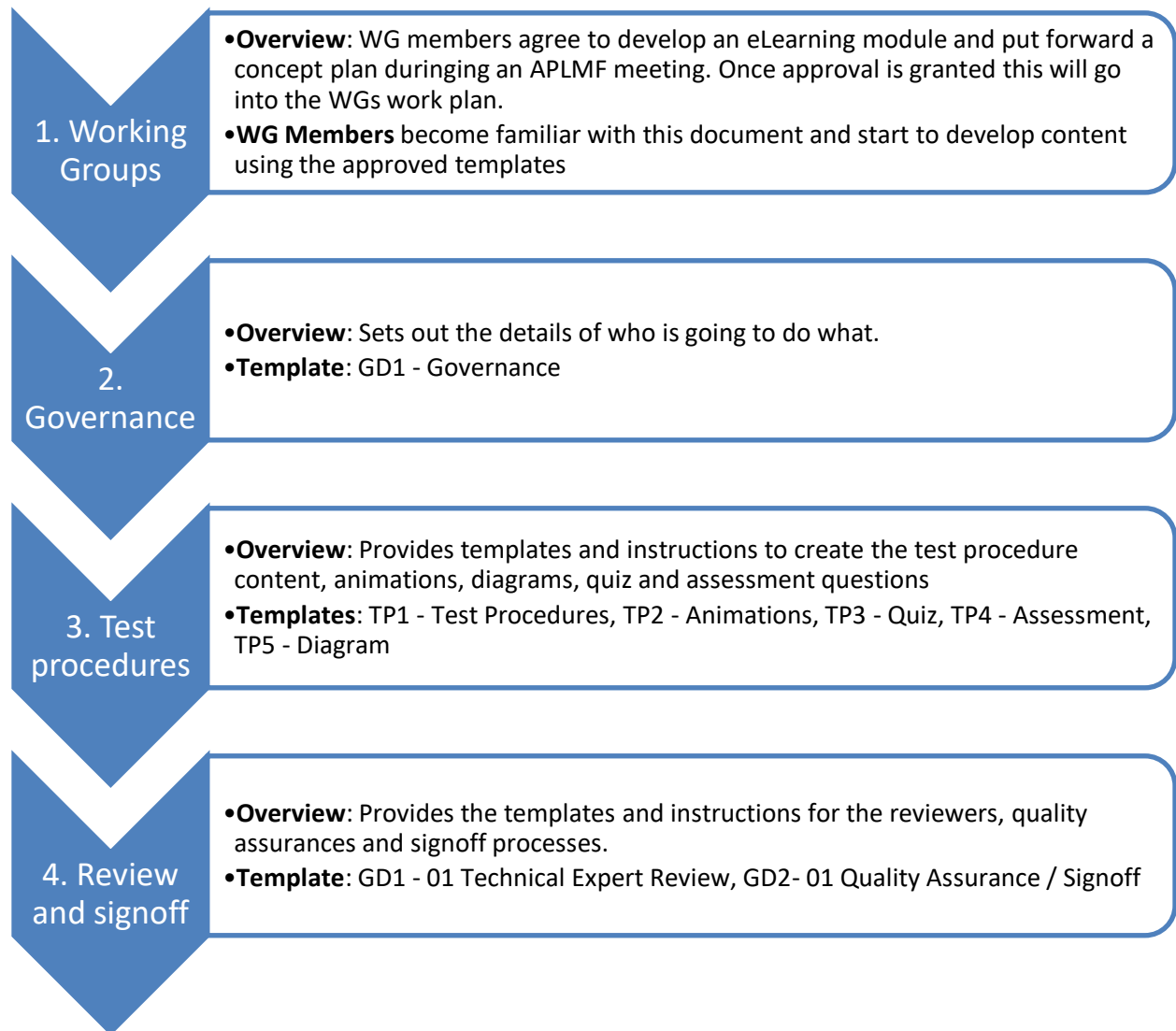
- an introduction
- test procedures
- animations that shows the test being performed
- a quiz
- an assessment to test the learner's knowledge

Learners can go in and out of a module as often as they like but need to achieve 100% on the assessment for each test procedure to pass the module.

The start page which is generic to all modules contains the following information:

- Welcome
- How the modules work / sample of home page
- Terminology

The diagram below shows an overview of the various stages in the development of a module and describes the templates that will be used during each stage.



Glossary of Terms

It is important to use consistent language when developing a module. This glossary will be increased as a result of the WGs suggestions. The latest OIML Recommendations, Documents, and Guidance can be used as reference for specific terminology used in a module

- **Metrology official:** an authorised person acting under national legislation. Also applicable to a third-party Verifier or Tester acting under national legislation.
- **Module:** a complete series of test procedures for a particular OIML recommendation
- **MPE:** Maximum Permissible Errors
- **Service inspection:** the test applied to an instrument that is inspected “as found” or “in service” Twice the MPE specified for verification is applied. The test may also include the application of seals, marks, or certificates as prescribed in national legislation. “On Inspection” has the same meaning as “Service inspection” in [OIML R76-1 2006](#)
- **Test procedure:** individual procedure performed as part of a module
- **Verification:** the test applied to an instrument that is new or has been repaired. MPE specified for verification is applied. The test may also include the application of seals, marks, or certificates as prescribed in national legislation.

000 – Document Control Matrix

This is a list of all templates and documents used to develop your online training modules. It shows their number, title and a brief description. It also shows their relationship to each other.

There are 3 titles used to keep track and store documents in the document control matrix:

- **000 Series:** Miscellaneous documents and correspondence important to the module development, e.g. emails from expert reviews, correspondence between members
- **GD Series:** How to develop an eLearning Module (GD0), The Governance document (GD1), Expert review requests (GD2), Quality control and signoff (GD3).
- **TP Series:** Test procedures

Add additional lines as required by your WG.

Miscellaneous Documents '000' Series

Number	Title	Description	Owner
000	Document control matrix		

Guidance Documents 'GD' Series

Number	Title	Description	Owner
GD0	How to develop an eLearning Module		
GD1	Governance document		
GD2	Expert review documents		
GD3	Quality assurance and signoff		

Test Procedures 'TP' Series

Number	Title	Description	Owner
TP1	Test Procedures		
TP2	Animations		
TP3	Quiz		
TP4	Assessment		
TP5	Diagrams		

GD1 – Governance Document

Introduction

This section sets out the details of who is going to do what during the development of the module. It is completed by the members of the WG at the start of the project. The WG will need to identify appropriate technical experts to review the content and provide feedback. At least one reviewer should represent the views of OIML. The Training Coordinator provides quality assurance and approves the content before it goes to the developer.

Module Name

- [insert name here]
- [insert OIML recommendation doc / link]

Working Group: [insert name]

Positions	Name	Responsibility
Chair:	• [insert name]	
Members:	• [insert name] • [insert name]	
1. OIML Reviewer: 2. Reviewer: 3. Reviewer:	• [insert name] • [insert name] • [insert name]	
Approval to send to the developer:	• [insert name]	
Quality Assurance Signoff	• Training Coordinator	

Project plan

[insert brief outline of the project and an explanation about what will be covered by the module and what will not be covered.]

Timeline

The boxes below are a guide to assist the WG to develop a timeline. Modify the boxes below to suit the process the WG intends to follow. A timeline should be developed by the WG at the start of the project and should be reflected in the WG work plan. It should be reviewed each 6 months and modified as the project proceeds to accommodate unexpected events.

Process



Time



Documents Required



Test Procedure Content

Introduction

This section provides templates and instructions to create the content that will be used to develop test procedures, animations, diagrams, assessment questions.

The following templates are found in this section and are sequentially numbered as used, for example, TP1_01, TP1_02, and TP1_03 etc.

Templates	How to use template
TP1 – Test Procedures	<p>Complete a separate template for each test procedure you wish to include in the module.</p> <p>Use the following naming convention for each template. TP1_01 (Name of test) e.g.</p> <ul style="list-style-type: none"> • TP1_01 Discrimination • TP1_02 Accuracy <p>Reference animations and diagrams in the content where they will be placed e.g. Insert diagram/animation here of XXX – see diagram TP5_01</p>
TP2 – Animations	<p>Complete a separate template for each animation you wish to include in the module.</p> <p>Use the following naming convention for each template TP2_01 (Name of animation)</p>
TP3 – Quiz	<p>Complete one template for the quiz you wish to include in the module.</p> <p>Use the following naming convention for each template TP3_01 (Name of test)</p>
TP4 – Assessment	<p>Complete one template for the assessment you wish to include in the module.</p> <p>Use the following naming convention for each template. TP4_01 (Name of test)</p>
TP5 – Diagrams	<p>Complete a separate template for each diagram you wish to include in the module.</p> <p>Use the following naming convention for each template. TP5_01 (Name of diagram)</p>

Each template contains the following sections:

Section	Purpose
Heading	This is what you want to write content about
Guidance notes	Some hints about format to consider while writing the content
Module Content	This is a box where you write the content. This is what will be available to the learner.

TP1 – [insert name of test]

TP1_XX

OIML Reference Document

- [insert OIML recommendation doc / link]

Purpose of test

Guidance notes

- Short explanation in plain English to explain why the test is performed
- 1 - 2 sentences only
- Reference any animations or diagrams where required

Module Content

Before you start

Guidance notes

This section appears at the start of each test procedure and provides flexibility for the learner to go straight to the assessment if they think they already have enough knowledge. The section below shows you how it will appear for the learner. You need to provide text for the: **Before you start box**. This text should focus on areas where learners make common errors such as not using the correct / same units. This does not need to be long and can be the same for all tests.

Before you start provides information and hints on what you should know before you complete the test.

The **Procedure** is made up of an animation, an interaction and quiz that will help you understand and complete the test.

The **Assessment** is a series of questions that ensures you can perform the test effectively. You can complete the **Assessment** whenever you choose. You will need to get 100% to pass.

Before you start box

Test procedure

Guidance Notes

- Bullet points
- Keep it simple
- Correct sequence to match how it should be performed
- Use procedural text e.g. start each point with a verb
- Minimum procedures to meet requirements of reference document
- When using these templates, you can create as many individual procedures in a test programme as required

Module Content

--

TP2 – Animations

TP2_XX

Guidance notes on writing / explaining animations

- Each animation should follow the written test procedure precisely.
- The animation is a visual representation of the test procedure.
- If the test procedure takes a long time, the animation can be split into multiple parts.
- Write the audio script as a person would speak for the voiceover.
- Video yourself doing the test to help show how it works, any sort of video recorder or phone will do. This will help the animator.
- For an example of an animation refer to the link in the appendix.

Notes to the animator (Describe what you want the animation to show)

Audio script

List any videos or photos included to explain the animation

Use a naming convention that shows which template the video is attached to e.g. TP2 name animation 001 or TP2 Name animation 002

TP3 – Quiz

TP3_XX

Guidance notes

- Questions only appear one at a time in the module
- It's recommended that there are 3-5 technical questions for each test procedure
- Questions should be about the most important or complex part of the procedure
- Questions are multiple choice with the possibility of having more than one correct answer.
- Place the correct answer/s under the heading feedback - the learner will be able to see this
- Feedback is written for each answer and will appear when that answer is chosen

Module Content (add as many questions as you require)

Question:

[insert content here]

Answers: Highlight the correct answer / answers

1. [insert content here]
2. [insert content here]
3. [insert content here]
4. [insert content here]
5. [insert content here]

Feedback:

[insert content here]

Question:

[insert content here]

Answers: Highlight the correct answer / answers

1. [insert content here]
2. [insert content here]
3. [insert content here]
4. [insert content here]
5. [insert content here]

Feedback:

[insert content here]

TP4 – Assessment

TP4_XX

Guidance notes

- Questions only appear one at a time in the module
- It's recommended that there are 3-5 technical questions for each test procedures
- Questions should be about the most important or complex part of the procedures
- Multiple choice – 2-5 possible answers
- The feedback **should not include** the answer to the question, it should include advice on where the learner should go look for the answer e.g. 'Not Quite – go back and re-read the test procedure'

Module Content

Question:

[insert content here]

Answers: Highlight the correct answer / answers

1. [insert content here]
2. [insert content here]
3. [insert content here]
4. [insert content here]
5. [insert content here]

Feedback:

[insert content here]

Question:

[insert content here]

Answers: Highlight the correct answer / answers

1. [insert content here]
2. [insert content here]
3. [insert content here]
4. [insert content here]
5. [insert content here]

Feedback:

[insert content here]

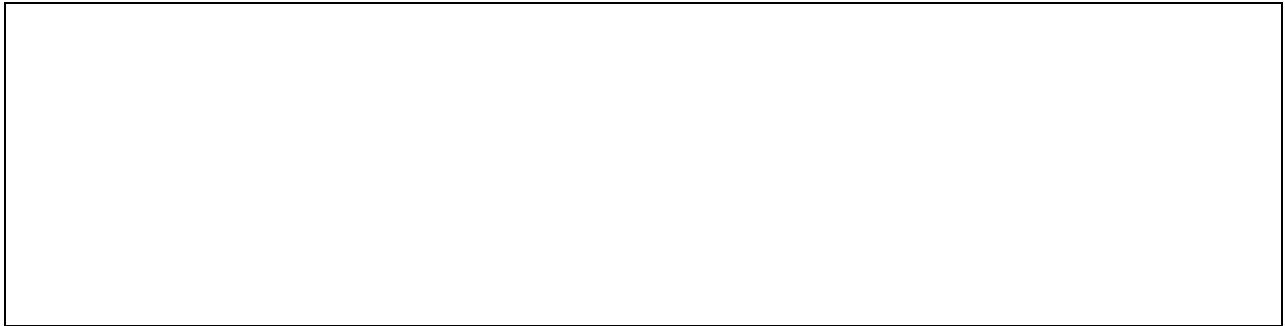
TP5 – Diagram

TP5_XX

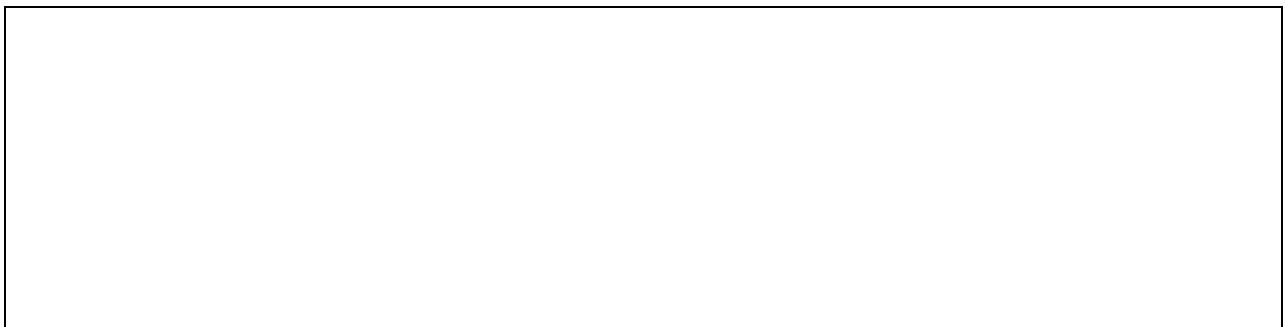
Guidance notes

- A hand drawn diagram on a piece of paper is OK
- You can photograph and add into the template
- Keep diagram and script simple and clear
- Minimal script and explanation

Diagram



Notes / scripts / explanation (if any)



List any photos or files included to explain the diagram

Use a naming convention that shows which template the attachment relates to e.g. TP5 Name diagram 001 or TP5 Name diagram 002

Guidance Documents

This section provides templates for the review process.

Templates	How to use template
GD2 – Technical Expert Review	Provide this completed template to each reviewer Use the following naming convention for each template. GD1_01 (Name of module/name of reviewer)
GD3 – Quality Assurance and Signoff	WG Chair and Training Coordinator will complete this process

Expert reviewers will be sent a copy of the final document before quality assurance and final signoff so they can further input, if required.

GD2 – Technical Expert Review

GD2_XX

Name of Module: [insert content here]

Reference Document

- [insert OIML recommendation doc / link]
- [insert another standard if relevant / link]

Technical experts

Name	Position	Email
[insert content here]	[insert content here]	[insert content here]
[insert content here]	[insert content here]	[insert content here]
[insert content here]	[insert content here]	[insert content here]

Scope of the Module (modify to suit topic)

- This-module has been designed to provide training in the procedures for the testing of [insert content here], and are a practical guide for Metrology Officials in the field
- The module will be used by participants who have English as a second language

Objectives

- To review the content against the relevant OIML reference documentation or another standard
- To provide comments or suggestions to make the procedures technically correct
- To give feedback to the working group on the content / format

Guidance notes (modify as required)

- Feedback is best provided as track changes or comments to the original document – this way everyone can see what has been edited / updated
- Consider whether the tests have been broken down sufficiently into the minimum / best steps required
- Are the tests shown in the appropriate order?
- Identify anything that is technically incorrect?
- Are the procedures logical and easy to follow?

List of documents supplied for this review

Document number/name	Document purpose
[insert content here]	[insert content here]
[insert content here]	[insert content here]

Overall report by reviewer

Add your report to the box below and return it to the WG Chair for action. cc Training@aplmf.org

GD3 – Quality Assurance and Signoff

GD3_XX

OIML Reference Document

- [insert OIML recommendation doc / link]

Objectives

- To ensure the module content meets a high standard and is following OIML recommendations
- To confirm the project plan has been followed
- To ensure all content has been reviewed by technical experts and signed off by WG Chair.
- To finalise content to hand over to developer

Guidance notes

- Feedback is best provided as track changes or comments to the original document – this way everyone can see what has been edited / updated

Overall report by WG Chair

Add your comments regarding the next step in the box below

Overall report by Training Coordinator

Add your comments regarding the next step in the box below

Return completed form to the WG and cc secretariat@aplmf.org

Appendix - Samples of completed templates

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000 Document Control Matrix

This is a list of all templates and documents used to develop the NAWI eLearning modules. It shows their number, title and a brief description. It also shows their relationship to each other.

Miscellaneous Documents '000' Series

Number	Title	Description	Owner
000	Document Control Matrix	Lists all the templates	KT
001	How to develop an eLearning Module	Contains all the templates required to develop a module in a uniform manner.	KT
002	APLMF NAWI Learning module notes to reviewer	Notes to reviewer	JC
003	NZ NAWI module	Word version of NZ NAWI module, for reviewer notes / comments	JC
004	Expert review feedback	Email with attachments from APLMF expert review	WG chair
005	Expert review feedback	Email with attachments from OIML expert review	WG chair

Guidance Documents 'GD' Series

Number	Title	Description	Owner
GD1	Governance document	WG governance document	WG chair
GD2_01	Expert review	Expert review guidance notes	MH
GD2_02	2 nd Expert review	Expert review guidance notes	MH
GD3_01	Quality assurance and final signoff	Signoff by WG Chair and Training Coordinator	MH

Test Procedures 'TP' Series

Number	Title	Description	Owner
TP1_01	Introduction / terminology	describes purpose of test and terms used	JC
TP1_02	Visual inspection	describes requirement's for test	JC
TP1_03	Repeatability test	describes requirement's for test	JC
TP2_01	Animation – repeatability	describes the animation	JC
TP3_01	Quiz – visual inspection	questions, answers and feedback for quiz	JC
TP3_02	Quiz – repeatability	questions, answers and feedback for quiz	JC
TP4_01	Assessment visual inspection	questions, answers and feedback for assessment	JC
TP4_02	Assessment – repeatability	questions, answers and feedback for assessment	JC
TP5_01	Diagram – Visual inspection	Sample diagram for visual inspection	JC

GD1 - Online Training Module Governance

Introduction

A document that sets out the details of who is going to do what with attached timeline

Test Programme Name

- APLMF NAWI eLearning module ≤ 300 kg

Group Details

Working Group:	<ul style="list-style-type: none"> • APLMF NAWI e-module
Chair:	<ul style="list-style-type: none"> • XXXX
Members:	<ul style="list-style-type: none"> • Kim Truscott (project manager) • Julian Crane • Marian Haire • WG chair Suliana
Subject Matter Experts:	<ul style="list-style-type: none"> • Julian Crane
Expert Review:	<ul style="list-style-type: none"> • APLMF Suliana • OIML reviewer to be confirmed
Quality Assessment:	<ul style="list-style-type: none"> • Marian Haire • WG chair
Signoff / Approval:	<ul style="list-style-type: none"> • Marian Haire • WG chair

References

- [OIML R76-1 2006](#)
- NMI NITP

Responsibilities and Authority of Members

Everyone

- Agreeing project timelines and sticking to them
- Adherence to the documented procedures

Chair

- Overall governance of group
- Signoff on GD2 prior to handover of material to developer
- Final project signoff

Members

- Julian Crane, Technical writing, drafting of animations, scripts, procedures and diagrams required
- Kim Truscott, Project manager, Developer selection, Quality assurance on programme
- Marian Haire, Training Co-ordination, APLMF

Subject Matter Experts

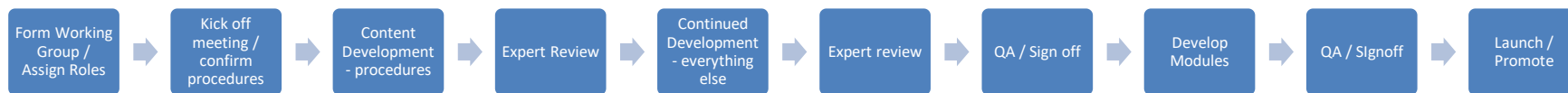
- Julian Crane, as detailed above

Expert Reviewer

- APLMF reviewer, provided by Australia
- OIML reviewer, provided by OIML Secretariat

Development Timeline

Process



Time



Documents Required



TP1 - Test Procedures - Repeatability Test

TP1_03

OIML Reference Document

- OIML R 76 page 83, 8.3.3

Purpose of test

The repeatability test is performed to confirm that the difference between the results of several weighing's of the same load shall not be greater than the absolute value of the maximum permissible error for that load

Module Content

- Before you start – repeatability (taken from NZ module)
- Purpose of test introduction
- Test procedure
- Animation
- Self-assessment
- Assessment

Test Procedures

Guidance Notes on writing test procedures

- Bullet points
- Keep it simple
- Correct sequence to match how it should be performed
- Minimum procedures to meet requirements of reference document
- When using these templates, you can create as many individual procedures in a test programme as required

Module Content -Repeatability

Before you start – Repeatability

Remember

Always work in the same units – kg or g – don't mix them up! So, a scale can be described as 30 kg x e = 0.01 kg or 30 000 g x e = 10 g – both the same thing, but it gets confusing if you mix the units together, especially if you're using a calculator.

Note: We learnt in a previous module that a digital indication rounds to $\pm 0.5e$. In practical terms this means that if we put a load on an instrument and the indication is equal to the load then the scale has an error of $\leq 0.5e$. As the smallest value we apply for MPE is $\pm 0.5e$, if the indication is equal to the weight then it is a pass and we don't need to calculate any further errors for that load.

The above rule applies to the following tests when standard weights are used:

- > weighing performance
- > eccentricity
- > repeatability
- > tare weighing tests

If an indication doesn't equal the test load then the error needs to be calculated using delta loads. Do this using the equations below that you learnt in Module 2.

- > $P = I + 0.5e$ - delta loads
- > $E = I + 0.5e$ - delta loads - L

Note: The MPE for the repeatability test is different from other tests; it is the *actual value* of the MPE. As an example, where $e = 10$ g, if the MPE is $\pm 1.5e$, then the actual value of the MPE is 15 g. This is the permitted value of the range between any readings

Procedure

Note to developer: for formatting please see the NZ modules for colours, fonts, layout etc.

1. Select the test load, about 0.8 Max is sufficient
2. Set the instrument to zero
3. Apply the load and set the displayed indication to centre of e in the following way:
 - apply $0.5e$ to the load receptor
 - apply additional standard weights of $0.1e$ with the load until the indication changes up and stabilises: then
 - remove $0.5e$ leaving the additional standard weights with the load
4. Record the indication
5. Remove the load and the additional standard weights together as one load

6. Rest the instrument to zero if the indication does not show zero
7. Apply the load and the additional standard weights together as one load
8. Record the indication and determine if the instrument has passed or failed in accordance with the following requirements:
 - If the indication is the same as the previous test, then repeat steps 6 to 8 with the same load. If all three loads show the same indication, then this is a PASS
 - If the indication for the second or third load changes and stabilises at $\pm 1e$ from the original indication, then it will be necessary to find each load's actual position to determine whether the instrument has passed or failed.
 - Use the formula: $P = I + 0.5e - \Delta L$ to calculate the indications prior rounding
 - If the range between the smallest and largest reading is greater than the actual value of the MPE for the load applied, then the instrument FAILS

TP2 – Animation Repeatability

TP2_01

OIML Reference Document

- [insert OIML recommendation doc / link]

Guidance notes on writing / explaining animations

- The animation script will be written as a person would speak
- The animation should follow the written test procedure precisely
- The animation is a visual representation of the test procedure
- Write the audio script for the voiceover
- Describe how the procedures will come to life in detail
- Video yourself doing the test to help show how it works
- This process will probably involve 1 on 1 discussions with the developer

Animation Script

Note to developer: try to match the pace, tone and clarity of the existing voiceovers in the existing modules that this is paired with. The voice over will need to be timed with the animation to correctly line up with actions, animation actions shown in yellow, voice script in “black”

Start:

1. “let’s perform a repeatability test on an instrument with a maximum capacity of 30 kg and $e = 10\text{ g}$ ” the test load of about 0.8 of max is 24 kg.” We will be testing the instrument to On Verification MPE” (show the instrument with the finger pointing to max capacity, and then $e = 10\text{ g}$, also show the section of the MPE table and the MPE for Verification at 2400e)
2. “First we push the zero button to set the instrument to zero” (show a finger pushing the zero button and the scale zeroing, 00.00 kg)
3. “now we apply the load” (show the 24 kg load being placed on the instrument, it will be 1 x 20 kg and 2 x 2 kg weights indication = 24.00 kg)
4. “next we apply 0.5 e” (show a 5 g weight being applied, the indication remains at 24.00 kg)
5. “Now we apply weights of 0.1 e until the indication changes up and stabilises (indication = 24.01 kg), then we remove the 0.5 e, this sets the indication to the centre of the division, 24.00 kg” (show 2 x 1 g weights being applied, then the indication changes up to 24.01 kg, then show the 0.5e weight being removed and the indication dropping back by 1 e to show 24.00 kg)
6. “record the indication” (show a table on the screen with 3 rows, record the first indication of 24.00 kg)
7. “remove the load and the additional standard weights as one load” (show the load being removed and the instrument returning to zero)
8. “Reset the instrument to zero if the indication does not show zero” (let the instrument return to zero, 00.00 kg, no need to show the instrument being re-zeroed)

9. “apply the load and additional standard weights together as one load, record the indication” (show the load being re-applied and the indication showing 24.00 kg)
10. “if the indication is the same as the previous test, then re-apply the load again, if all three indications show the same reading then this is a pass” (show the load being applied again and the indication = 24.00 kg, show the table with all three indications the same and a big green tick comes up showing a pass)
- Note:** for an example, reference the NZ module repeatability animation
11. “If the indication for the second or third load changes and stabilises at $\pm 1e$ from the original indication then it will be necessary to find each load’s actual position to determine whether the instrument has passed or failed. Use the formula $P = I + 0.5e - \Delta L$ to find the actual position of each load.” (show the formula coming up big on the screen)?
12. “Remember to apply the correct MPE depending on whether the test is on verification or on inspection, and that you apply the MPE as the actual value” (it would be useful here to show the MPE table come up with first the verification column highlighted, then the on inspection column highlighted, also show the MPE with a \pm sign then put a cross through it to show that it is the “actual value” of the MPE that is applied)

Notes to the animator

Animation

Start with a picture of the scale, while explaining the max capacity, 30 kg and $e, =10$ g



TP3 –Quiz Repeatability

TP3_02

OIML Reference Document

OIML R76-1 2006 Page 93, A.4.10, #3rd Paragraph, 3.6.1

Guidance notes

- Questions only appear one at a time in the module
- It's recommended that there are 3-5 technical questions for each test procedures
- Questions should be about most important or complex part of the procedures
- Multi choice – 2-5 possible answers
- The feedback **should include** the answer to the question

Module Content

Multiple choice or multi select? Highlight one

Question:

A 30 kg $\times e = 10$ g instrument is being tested, what is the test load that will be used?

Answers: Highlight the correct answer / answers

1. 30 kg
2. 24 kg
3. 15 kg
4. 10 kg

Feedback:

If answer #2 is given, the feedback is "Correct, the test load is about Max $\times 0.8$ "

If answer #1, #3, #4 is given then the feedback is "not quite, the test load is 24 kg, about Max $\times 0.8$ "

Multiple choice or multi select? Highlight one

Question:

How many times is the test load applied?

Answers: Highlight the correct answer / answers

1. 6
2. 4
3. 3
4. 2

Feedback:

If answer 3 is given, the feedback is "Correct, the test load is applied 3 times"

If answer #1, #2, #4 is given then the feedback is "Not quite, the test load is applied 3 times"

Multiple choice or multi select? Highlight one

Question:

A 30 kg x $e = 10$ g instrument is being tested on verification, what is the MPE that is applied?

Answers: Highlight the correct answer / answers

1. Actual value of MPE = $1.5e$
2. MPE of $\pm 2e$
3. Actual value of MPE = $2e$
4. MPE of $\pm 1.5e$

Feedback:

If answer #1 is given, the feedback is "Correct, the MPE applied is the actual value of the MPE= $1.5e$ "

If answer #2, #3, #4 is given then the feedback is "not quite, the load applied is 24 kg or $2400e$, the MPE applied at $2400e$ on verification is $\pm 1.5e$, the actual value of the MPE = $1.5e$

TP4 – Assessment**TP4_02****OIML Reference Document**

- OIML R76-1 2006 page 93, A.4.10 #3rd paragraph, 3.6.1

Guidance notes

- Questions only appear one at a time in the module
- It's recommended that there are 3-5 technical questions for each test procedures
- Questions should be about most important or complex part of the procedures
- Multi choice – 2-5 possible answers
- The feedback **should not include** the answer to the question, it should include advice on where the learner should go look for the answer e.g. 'Not Quite – go back and re-read the test procedure'

Module Content

Multiple choice or multi select? Highlight one

Question:

A 150 kg x $e = 50$ g instrument is being tested for repeatability, what is the test load that will be used?

Answers: Highlight the correct answer / answers

1. $\frac{1}{2}$ max capacity, 75 kg
2. $\frac{1}{3}$ Max capacity, 50 kg
3. Max x 0.8, 120 kg
4. Max x 0.6, 90 kg

Feedback:

If answer #3 is highlighted then the feedback is "correct, the test load is Max x 0.8, 120 kg"

If answer #1, #2, #4 is given then the feedback is "not quite, go back and re-read the test procedure"

Multiple choice or multi select? Highlight one

Question:

How many times is the load applied?

Answers: Highlight the correct answer / answers

1. One sequence of 4 weighing's
2. Two sequences 2 weighing's
3. One sequence of 3 weighing's
4. Two weighing's

Feedback:

If answer #3 is highlighted then the feedback is "correct, the load is applied as one sequence of 3 weighing's"

If answer #1, #2, #4 is given then the feedback is "not quite, go back and re-read the test procedure"

Multiple choice or multi select? Highlight one

Question:

A 150 kg $\times e = 50$ g instrument is being tested *on inspection*, what is the MPE that is applied?

Answers: Highlight the correct answer / answers

1. MPE = $\pm 3 e$
2. Actual value of MPE = $3 e$
3. Actual value of MPE = $1.5 e$
4. MPE = $\pm 2 e$

Feedback:

If answer #2 is highlighted then the feedback is "correct, the MPE applied is the actual value of the MPE = $3 e$ "

If answer #1, #3, #4 is given then the feedback is "not quite, go back and re-read the test procedure"

TP5 – Diagram

TP5_01

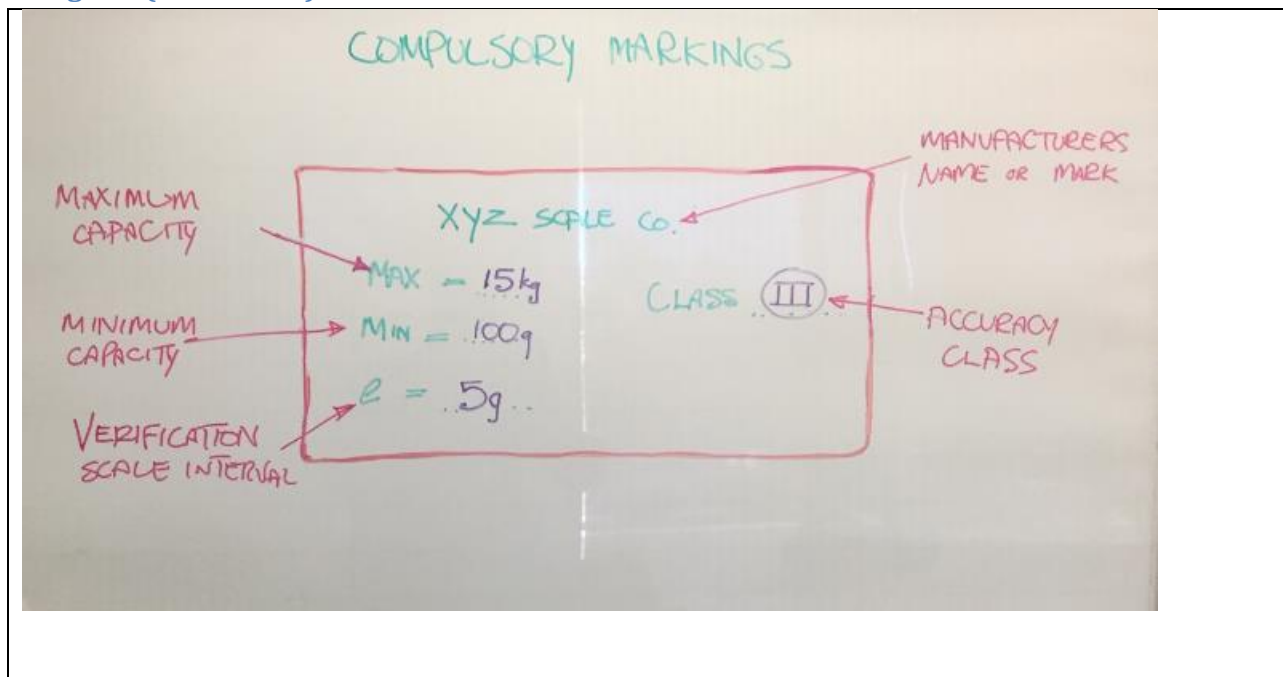
OIML Reference Document

- OIML R76-1 2006 Page 76, 7.1.1

Guidance notes

- A hand drawn diagram on a piece of paper is ok
- You can photograph and add into the template
- Keep diagram and script simple and clear
- Minimal script and explanation

Diagram (insert here)



Notes / scripts / explanation (if any)

Diagram shows a manufacturer's ID plate the explanations could be permanent labels with arrows or could bring up the description by putting the cursor over the item

e.g., put the cursor over the "e" symbol and the description box comes up as "e = the verification scale interval and this is a compulsory marking"

GD2_01 – Technical Expert Review

GD2_01

Name of Module: APLMF NAWI eLearning module ≤ 300 kg

Reference Document

- OIML R76-1 2006

Technical experts

Name	Position	Email
Mr Metrology	Head of testing	Metrology@gmail.com
Ms Scientific	Metrology Senior Advisor	Mscientific@gmail.com

Scope of the Module (modify to suit topic)

- This module has been designed to provide training in the procedures for the testing of NAWI ≤300 kg. They are a practical guide for Metrology Officials in the field
- The module will be used by participants who have English as a second language
- Class III and Class IIII NAWI only are covered in the module and in all cases e=d
- Because of the capacity restraint instruments are presumed to have ≤ 4 points of support
- The module is written for instruments that are self-indicating with digital indications

Objectives

- To review the content against the relevant OIML reference documentation or other agreed standard
- To provide comments or suggestions to make the procedures technically correct
- To give feedback to the working group on the content / format

Guidance notes (modify as required)

- Feedback is best provided as track changes or comments to the original document – this way everyone can see what has been edited / updated
- Consider whether the tests have been broken down sufficiently into the minimum / best steps required
- Are the tests shown in the in the appropriate order?
- Identify anything that is technically incorrect?
- Are the procedures logical and easy to follow?

List of documents supplied for this review

Document number/name	Document purpose
TP1_01	Test procedure, weighing performance
TP2_02	Test procedure, animation, weighing performance
TP3_01	Test procedure, Quiz, weighing performance
TP4_02	Test procedure, Assessment, weighing performance

Overall report by reviewer

Add your report to the box below and return it to the WG Chair for action. cc Training@aplmf.org

GD3 – Quality Assurance and Signoff

GD3_01

OIML Reference Document

- OIML R76-1 2006 Verification tests, page 82, 8.3

Objectives

- To ensure the module content meets a high standard and is following OIML recommendations
- To confirm the project plan has been followed
- To ensure all content has been reviewed by technical experts and signed off by WG Chair.
- To finalise content to hand over to developer

Guidance notes

- Feedback is best provided as track changes or comments to the original document – this way everyone can see what has been edited / updated

Overall report by WG Chair

Add your comments regarding the next step in the box below

Report and summary of the reviewer's comments in relation to content standard

Report and comment on completion of project plan

Confirmed completion of review process and by who

Signoff by Expert reviewers and chair

Overall report by Training Coordinator

Add your comments regarding the next step in the box below

Summary of completion of module development and completion before handing over to developer for the next stage.

Return completed form to the WG and cc secretariat@aplmf.org