

Proposed Training and Competency Model

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Executive summary

Background

This is a priority project which was identified by the CoPTTM Governance Group (CGG) and the NZTA, who were given a recommendation to introduce competence checks as a result of a Coroner Court inquiry.

The Training and Competency Working Party (consisting of 11 industry representatives - including 6 CGG members) have developed a Training and Competency model.

The industry has been involved in the development of the model through:

- Representation on the working party
- Industry consultation through 4 workshops (Dunedin, Christchurch, Palmerston North and Auckland) – 339 submissions were received during the industry consultation workshops.

There was general consensus from the industry that the Training and Competency model, as amended by feedback, was the right way to proceed.

Refer to [Appendix 1](#) for background information on this project, rationale for the project and list of working party members.

Refer to [Appendix 2](#) for the terms of reference for this project.

Training and competency model

The model consists of 3 parts:

Roles	• A list of key roles or groups requiring some form of CoPTTM knowledge
Map	• A map showing the CoPTTM learning blocks with a preferred order of learning and any pre-requisites
Profiles	• A profile for each learning block identifying the knowledge to be covered during the learning and the skills to be assessed after the workshop/briefing has been completed

Refer to [Appendix 3](#) for information about competencies (introduction and explanation of competencies and about the training and competency model)

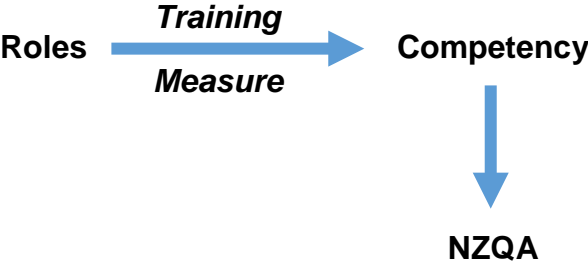
Recommendation

The Training and Competency working party recommends that CGG submits the Training and Competency model to the NZTA recommending that it be adopted.

NZTA to produce a strategy and project plan for the implementation of the Training and Competency model.

Considerations when developing the model

The working party considered the following points as they were developing the model.

Item	Comments
<p>Timing is right</p>	<p>It was acknowledged that the timing of this review was opportune, and that the TTM industry was ready to make a change. There is a need for professionalism throughout the industry. The industry needs people to look at TTM as a career and provide pathways for this.</p> <p>The expectation needs to be on worker practical competency in relation to on-site safety for all stakeholders, and not driven by or focussed on cost.</p>
<p>Development of the training and competency model</p>	<p>It was decided that the best way to develop the model was to work through the following process:</p> <ul style="list-style-type: none"> • Identify the key TTM roles requiring CoPTTM competency (of some type) • Identify the elements needed to be competent in the roles (primarily knowledge and practical skills) • Identify the training needs, and measures for testing of sufficient knowledge/skill. • Use these competencies to revise the NZQA unit standards. <p>The following model shows this process:</p> <div style="text-align: center;">  <pre> graph LR Roles[Roles] -- Training / Measure --> Competency[Competency] Competency --> NZQA[NZQA] </pre> </div>
<p>Probationary qualification</p>	<p>It was also suggested that we consider a probationary qualification as people gain skills and become fully competent. Once the necessary elements are completed for a role, the person can be awarded the full qualification.</p> <p>This would be similar to the approach taken with driver licensing.</p>

Item	Comments
<p>Certificate of Temporary Traffic Management registered on the NZ Qualification framework</p>	<p>Evolution Road Services are working on a project with Connexis (the Industry Training Organisation) to investigate the feasibility of developing a Certificate in Temporary Traffic Management.</p> <p>After the first meeting with industry representatives Connexis have signalled that they are keen to proceed with the certificate and have begun identifying the potential unit standards for the lower levels of the certificate (up to L1 STMS).</p> <p>It was agreed that Evolution Road Services would continue working with Connexis on the Certificate in Temporary Traffic Management but would signal to them that the unit standards relating to TTM will have to be reviewed to align to the new model.</p>
<p>Potentially use unit standards to assess competence</p>	<p>It was recommended that the industry should continue its relationship with NZQA and better utilise the TTM unit standards as part of the ongoing training and competence assessment.</p> <p>It was recommended that existing TTM unit standards are revised to better match the key TTM roles. Once revised, these unit standards would be used as part of the competence assessment for a TTM role.</p>
<p>Refresher workshops</p>	<p>It was acknowledged that once a unit standard is awarded there was no facility under NZQA to keep knowledge current. Therefore, NZTA would continue with refresher workshops to ensure warranted people are able to keep themselves current with changes to CoPTTM.</p> <p>The current refresher workshop approach may need to be amended so that all attendees receive information on the core CoPTTM changes with other specific information included on changes that impact a particular type of activity (eg mowing operations).</p> <p>Currently there is a 3-yearly refresher for warranted positions (eg TC, STMS LV and L1, STMS L2/3 P and NP). For some roles (eg TMC, TMP Designer) a 3-yearly refresher may not be frequent enough. NZTA will be reviewing the mechanisms for refreshing warrant holders on ongoing changes to CoPTTM and the frequency of the formal refreshers.</p>

Item	Comments
<p>Use of existing competency assessment material</p>	<p>James Scully, the Fulton Hogan representative offered access to their competence assessment framework including items assessed for each role and their assessment methodology to assist with the methodology process moving forward. Other companies also indicated that they may be able to supply information about their assessment methodologies.</p> <p>It was acknowledged that this information would be very helpful in the development of a model for CoPTTM training and competency.</p>
<p>Unit standard 20880 - Operate as a Site Traffic Management Supervisor (STMS) for Level 2 and 3 roads</p>	<p>Consider amending this unit standard so that it deals with 2 separate roading environments:</p> <ul style="list-style-type: none"> • Under 65km/h (urban environment with pedestrians) • Over 65 km/h (higher speed environment with a mix of heavy and light vehicles).
<p>Existing TC workshop</p>	<p>It was acknowledged that the existing TC workshop is being incorrectly used as an entry level workshop for workers. The workshop has been designed to train the deputy to the STMS and as such includes information that most workers do not need to know.</p> <p>Also, the TC workshop does not cover critical information about general work site safety that would normally be covered in worker training (eg how to work safely around heavy machinery within the working space).</p> <p>It is recommended that the TC be restricted to a maintainer of a worksite. This means that the TC will no longer be responsible for setup, changes to, and removal of TTM</p>
<p>Certificate and warrant</p>	<p>The candidate receives a certificate of achievement when they complete the knowledge component of a learning block. The warrant is awarded after achieving the pass criteria for all knowledge and practical skill elements within a learning block. There will be no partial warrant issued – the person will either be warranted or not warranted.</p> <p>For example, a certificate of achievement will be issued after the candidate completes the knowledge component of the TC learning block. TC warrant will be awarded after the candidate has been determined competent in all the tasks associated with the On Job practical component:</p>

Item	Comments
	<p>Must MAINTAIN at least 1 closure from each activity type listed below - one of the closures must include footpath or cyclist control.</p> <ol style="list-style-type: none"> 1. Shoulder closure, berm or footpath control 2. Lane merge, lane shift, and cycle lane, priority control and TSL 3. MTC.
<p>Database for recording certificate and warrant qualifications</p>	<p>NZTA is to investigate the option of having an online portal to allow for recording of candidate qualifications (certificates and warrants).</p> <p>There would still be a warrant card with photo identification and unique ID number. The actual qualifications held by the person would be recorded online.</p> <p>This would reduce the need to reissue warrant cards every time a new warrant is gained.</p>
<p>Practical assessment and reassessment</p>	<p>The purpose of practical assessment is to independently validate that candidates can perform activities to the required standard.</p> <p>Standards will be set for each activity that is to be assessed.</p> <p>An assessment guide will also be developed (based on NZQA guidelines for assessment and reassessment). It will include the principles of assessment and guidelines for reassessment.</p>

Implementation of the model

The working party have developed the model for Training and Competency but have not spent a lot of time considering the implementation of the model as this was outside the scope of their work.

Feedback received during the industry consultation sessions indicated that the industry would prefer some ideas for implementation of the model.

At the last working party meeting, a few options for implementation were considered.

Priority for development

NZTA acknowledges that the development of the learning packages (either training session, briefing, checklists of items to cover or online package) and the associated assessment packages for each of the learning blocks will need to occur over multiple years.

NZTA recommends that the following priority for development be adopted:

Priority 1	<ul style="list-style-type: none"> • TTM Mentor • TTM Verifier • CoPTTM Assessor • CoPTTM Trainer • General Worker • TTM Worker • TC • Universal STMS • STMS L1 • STMS L2 under 65km/h • STMS L2 over 65km/h and L3
Priority 2	<ul style="list-style-type: none"> • TMP Designer • Mobile driver • Inspector • Use of specialist TTM equipment on-site • Other specialist activities
Priority 3	<ul style="list-style-type: none"> • Manager of activities requiring TTM • TTM Audit • TMP Approver • Corridor Manager & TMC

Existing Warrants

There was general reluctance to having a recognition of prior experience procedure with candidates able to roll their existing warrant over to the new warrant without there being a validation of the person's competence.

As the learning blocks will be developed over multiple years it is recommended that the following strategy be applied as each learning block (and associated warrant) is implemented:

- The current warrant continues to apply until the expiry date for that warrant
Note: All existing roles automatically receive the certificate of knowledge for that role
- If the candidate wishes to continue to be warranted in that role, they complete the competence assessment(s) for the warrant with verification from a TTM Verifier/CoPTTM Assessor as required
- When the candidate attends the refresher workshop for the warrant the trainer renews the candidate at either:
 - the certificate of knowledge level, or
 - the warrant level (if the competence assessment has been completed)

To allow time for this process to be organised and TTM Verifiers to be warranted for the new learning block, it is suggested that an initial period of 6 months following the implementation of the new learning block be allowed before the competence assessment requirement kicks in.

This means that anyone refreshing their warrant during that 6-month phase in period for the learning block will not be required to complete the competence assessment for that warrant. They will however have to do the competence assessment at or before the next renewal of their warrant.

People in key roles requiring a warrant

For some key roles (eg TMC or TMP Approver) it may be necessary to consider an acting role during the transition period, with competency verification / proof / training etc being completed within a certain timeframe. There needs to be more discussion on how this strategy is to be applied.

A comparative costing

Before the model is submitted to NZTA for approval, a comparative costing will be developed showing the current approach versus the new approach for selected warranted positions.

This will allow NZTA and the industry to assess the costs associated with the implementation of the training and competency model.

Roles requiring some form of CoPTTM knowledge

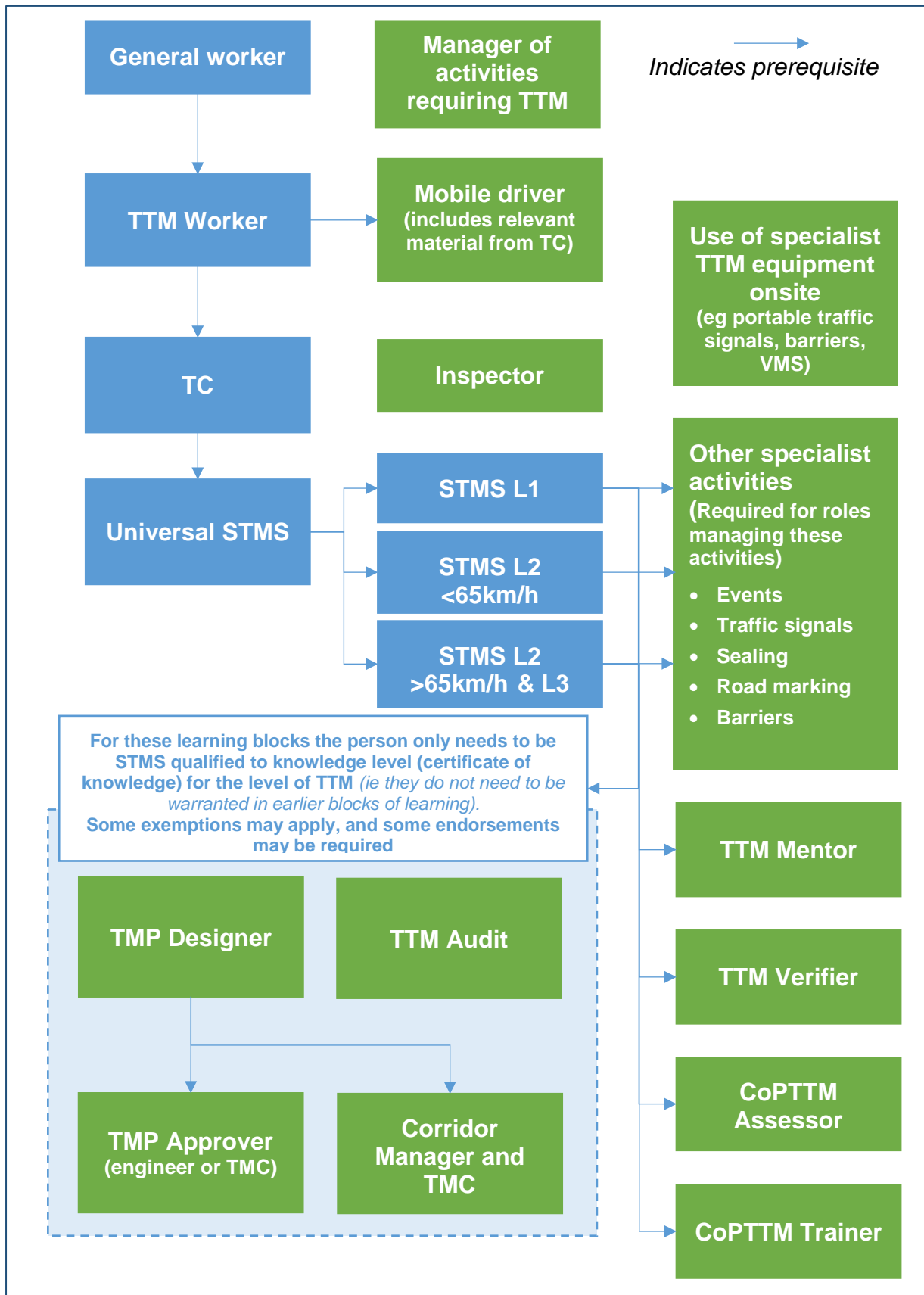
The following key TTM roles have been identified as requiring CoPTTM knowledge:

Role/Group requiring CoPTTM knowledge	What do they do – broad description	Learning blocks
General Worker (site personnel)	Anyone working on or who is likely to visit a worksite	General Worker
TTM Worker	A worker who assists with TTM under direction (eg puts signs and cones out, assists with stop/go, driving activity)	TTM Worker Mobile Driver
Inspector	A person carrying out inspection activities Note: This may include surveyors, staff working on their own, and people doing simple roadside activities provided their work fits within the range of inspection activities	Inspector
TC	The qualified person on level LV and level 1 roads who: <ul style="list-style-type: none"> Assists with deployment of the operation Maintains the site within existing TTM phase while the STMS is away from worksite. <p>Note: The TC will only be able to assist an STMS installing, modifying or removing TTM at a worksite</p> <p>Includes additional specialist activities for example, assisting an STMS with event management</p>	TC Use of specialist TTM equipment
STMS (Onsite supervisor)	Set up, change and remove a worksite to a predetermined plan Covers additional specialist activities if required eg Event management, traffic signals, sealing, road marking and barriers	Universal STMS STMS LV & L1 STMS L2 <65km/h

Role/Group requiring CoPTTM knowledge	What do they do – broad description	Learning blocks
	<p>All TTM at worksites on level 2 and level 3 (including shoulders) must be under the control of an STMS warranted for that level of road –L2 <65km/h, L2 >65km/h & L3</p> <p>In current terms, a L2/3 STMS must be in control of TTM on a shoulder and not an STMS-NP as is currently allowed</p> <p>This ruling also applies to capital projects where each worksite must be controlled by an STMS warranted for the level of the road</p> <p>Exceptions to this requirement may be dealt with by an EED or risk assessment which is signed off by the RCA</p>	<p>STMS L2 >65km/h & L3</p> <p>Other specialist activities</p>
TTM Mentor	Mentors/trains staff on the practical aspects of their role. May be an in-house person	TTM Mentor
CoPTTM Trainer	Formally trains people in CoPTTM requirements and the theoretical application of those requirements	CoPTTM Trainer
TTM Verifier	<p>Verifies work completed to standard (could be onsite or in the office)</p> <p>Up to STMS level 1 (includes TTM Worker, TC & L1 STMS) a verifier determines whether the candidate is competent</p> <p>At level 2 and level 3, the verifier furnishes an endorsement of competence to a CoPTTM Assessor</p> <p>The Verifier must be warranted to the level they are verifying</p> <p>May include a continued requirement for ROPEs</p>	TTM Verifier
CoPTTM Assessor	<p>Selected by NZTA to assess competence in a specific specialist activity (eg L2/3 practical assessment, TMP design assessment, barriers assessment)</p> <p>Note: Selection/authorisation process to be reviewed to improve assurance of Assessor competency</p>	CoPTTM Assessor

Role/Group requiring CoPTTM knowledge	What do they do – broad description	Learning blocks
TMP Designer	Develop and submit TMPs for approval. Brief onsite supervisor on TMP Also includes specialist activities as required. For example, Event management	TMP Designer
Corridor Manager (includes TMC)	Manage and permit road space impact (TMP and potentially WAP approvals)	TMP Approver Corridor Manager and TMC
Approving Engineer	To be considered as an option where Corridor manager and client mutually agree that this could add value. Includes first stage approval of a TMP	TMP Approver
Traffic Operations Manager	The person who may be multiple STMSs or the TTM activities of a company	No training provided as roles vary
Auditor	Assess worksites to support continuous improvement and identify and report on poor performance	TTM Audit
Manager of activities requiring TTM	People who are managing activities requiring TTM resources and do not require more detailed TTM qualifications - general high-level overview (these people would generally employ others to undertake TTM)	Manager of activities requiring TTM

Map of CoPTTM learning blocks



Note: The learning blocks do not cover all possible roles within an organisation.

Additional notes about learning blocks

Learning block	Other notes
Exclusions from map of learning blocks	<p>The following areas were excluded from the map of learning blocks as the industry groups develop their own training material which NZTA endorses:</p> <ul style="list-style-type: none"> • KCTL • NZ Fire service • Heavy Haulage • Roadside assistance • NZ Police
TTM Worker	Could include Stop/Go operations
Manager of activities requiring TTM	<p>Includes a general overview of key CoPTTM information that senior managers need to know</p> <p>Could be an online package</p>
Mobile Operation Driver	<p>Includes relevant material from TC</p> <p>Includes driving a shadow vehicle and pilot vehicle (AWVMS)</p>
TC	Restrict TC to a maintainer of a worksite. TC will no longer be responsible for setup, changes to, and removal of TTM
STMS	<p>Includes core competencies for an STMS</p> <p>Must be warranted for the level of road they are working on</p> <p>Some roles that progress from this entry level only require certification (knowledge component)</p>
Inspector	No prerequisites required for this training
Use of specialist TTM equipment	<p>Includes portable traffic signals, barriers, VMS</p> <p>Mechanics of setting up and operating equipment on-site from an approved plan – not designing the TMP</p> <p>This does not include determining placement on site</p> <p>Training provided by, and competency assessed by, the manufacturer (competence assessment may be completed by a CoPTTM Assessor for more complex equipment eg barriers)</p>
Learning block	Other notes

<p>Other specialist activities (optional)</p>	<p>Includes:</p> <ul style="list-style-type: none"> • Events • Traffic signals (both permanent and temporary) • Sealing • Road marking • Barriers <p>Knowledge/skill elements for each Complete elements as appropriate May attain competency prior to STMS qualification</p>
<p>TMP Approver</p>	<p>Includes engineer or TMC</p> <p>Engineers will now have to complete the TTM Worker, TC, STMS and TMP Designer blocks of learning</p> <p>Does not need to complete General worker learning block, and only needs certificate of knowledge (ie does not need warrant) for TTM Worker, TC and relevant STMS learning blocks</p>
<p>TMP Designer</p>	<p>STMS is a prerequisite</p> <p>Does not need to complete General worker learning block, and only needs certificate of knowledge (ie does not need warrant) for TTM Worker, TC and relevant STMS learning blocks</p>
<p>TTM Mentor</p>	<p>Agreed that this is a role and it would include on job training and coaching</p> <p>Decision to be made about whether there will be any CoPTTM training linked to this role</p> <p>Must be warranted for the level of road and any specialist activities/specialist equipment they are mentoring on</p>

Matrix - Warrant of competence (W) or Certificate of knowledge (Cert)

WORKSHOPS	ROLES															
	General Worker	TTM Worker	Inspector	TC	STMS LV & L1	STMS L2 <65km/h	STMS L2 >65km/h & L3	TTM Mentor	CoPTTM Trainer	TTM Verifier	CoPTTM Assessor	TMP Designer	Corridor Manager (includes TMC)	Approving Engineer (if approving TTPs)	Auditor	Manager of activities requiring TTM
General worker	W	W		W	W	W	W	W	W	W	W				Cert	
Manager of activities requiring TTM																Cert
TTM Worker		W		W	W	W	W	W	W	W	W	Cert	Cert	Cert	Cert	
Mobile driver (if required)	<i>W if required to be a driver in a mobile operation (or be in charge of a mobile operation)</i>															
Use of specialist TTM equipment	<i>W if required to program and operate specialist TTM equipment</i>															
TC				W	W	W	W	W	W	W	W	Cert	Cert	Cert	Cert	
Inspector			W													
STMS Universal					Cert	Cert	Cert	Cert	Cert	Cert	Cert	Cert	Cert	Cert	Cert	
STMS L1					W			<i>W for level of TTM</i>	<i>W for level of TTM</i>	<i>W for level of TTM</i>	<i>W for level of TTM</i>	<i>Cert for level of TTM</i>	<i>Cert for level of TTM</i>	<i>Cert for level of TTM</i>	<i>Cert for level of TTM</i>	
STMS L2 <65km/h					W											
STMS L2 >65km/h & L3						W										

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	General Worker	TTM Worker	Inspector	TC	STMS LV & L1	STMS L2 <65km/h	STMS L2 <65km/h & L3	TTM Mentor	CoPTTM Trainer	TTM Verifier	CoPTTM Assessor	TMP Designer	Corridor Manager (includes TMC)	Approving Engineer (if approving TMPs)	Auditor	Manager of activities requiring TTM
TTM Mentor								W								
TTM Verifier										W						
Other specialist activities	<i>W if required to be in charge of, or conduct training on specialist activities</i>															
CoPTTM Assessor											W					
CoPTTM Trainer									W							
TMP Designer												W	W (if approving TMPs)	W		
TTM Audit															W	
TMP Approver													W (if approving TMPs)	W		
Corridor Manager and TMC													W			

Profile for each block of learning

Set out on the following pages are the following learning block profiles:

1. **General Worker**
2. **Manager of activities requiring TTM**
3. **TTM Worker**
4. **Mobile Operation Driver**
5. **Traffic Controller (TC)**
6. **Inspector**
7. **Universal Site Traffic Management Supervisor (STMS)**
8. **STMS level LV and level 1**
9. **STMS level 2 under 65km/h**
10. **STMS level 2 over 65km/h and level 3**
11. **Traffic Operation Manager**
12. **Use of specialist TTM equipment on-site**
13. **Other specialist activities**
14. **TMP Designer**
15. **TTM Audit**
16. **TMP Approver**
17. **Corridor Manager & TMC**
18. **TTM Mentor**
19. **TTM Verifier**
20. **CoPTTM Assessor**
21. **CoPTTM Trainer**

1. Profile – General Worker

Block of learning:	General Worker	Who it is for:	Anyone working on or who is likely to visit a worksite Note: It is not intended that this briefing replace site induction, ConstructSafe etc, but offers a complimentary component.	
Prerequisite:	No prerequisites			
Competency objective	<ul style="list-style-type: none"> • Know how to enter and exit a worksite safely • Know how to work safely at a worksite (around road user and construction traffic) • Able to act as spotter for vehicle manoeuvres 			
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
Health and safety: <ul style="list-style-type: none"> • Identify / recognise correct PPE 	<ul style="list-style-type: none"> • Visual check onsite – TTM Verifier • Hi Vis worn correctly 	<ul style="list-style-type: none"> • Correctly wearing all PPE as per site requirements 	Briefing delivered by TTM Mentor	
Includes the following general worker information: <ul style="list-style-type: none"> • Entry/Exit points • Emergency procedures • Who to report to • Briefings • Roles and responsibilities of TTM personnel • Hazard identification - potential hazards within the worksite/road environment) • Working around plant and machinery • No go zones • Acting as spotter for vehicle manoeuvres 	<ul style="list-style-type: none"> • Scenarios dealing with common working space situations - can complete multiple times if required • TTM Verifier determines if knowledge requirement has been met 	<ul style="list-style-type: none"> • Pass 100% correct answers to scenarios 	Note about learning Much of the learning will be informal while on the road. Also, a reader/writer to be supplied if required Refresher <ul style="list-style-type: none"> • No refresher workshop 	

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			<ul style="list-style-type: none"> • Refreshed by briefing from STMS <p>Time</p> <ul style="list-style-type: none"> • 1 to 2 hours theory/ knowledge (plus on-site practical) <p>Related unit standards</p> <p>US 20877</p>
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
<p>General worker practical</p> <ul style="list-style-type: none"> • Wear correct PPE • Identify no go zones at a worksite • Acting safely at a worksite (around road user and construction traffic) • Acting as spotter for vehicle manoeuvres 	<ul style="list-style-type: none"> • TTM Verifier determines if the candidate is competent 	<ul style="list-style-type: none"> • Pass 100% 	

2. Profile – Manager of activities requiring TTM

Block of learning:	Manager of activities requiring TTM	Who it is for:	People who are managing activities requiring TTM resources (eg Project Managers, Managers of TMP Designers) and do not require more detailed TTM qualifications - these people would generally employ others to undertake TTM.	
Prerequisite:	No prerequisites			
Competency objective	<ul style="list-style-type: none"> • Basic knowledge of the key CoPTTM requirements and responsibilities for activities requiring TTM 			
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
<ul style="list-style-type: none"> • Purpose of CoPTTM • Contractors responsibilities in CoPTTM Section A5.7.1 • Health and safety processes relevant for the role • When TMPs are required - common situations requiring TMP • Risks to road users and TTM crew - scenarios • Crash stats and analysis • Crash reporting • STMS appointment and suspension • Supporting TTM staff and STMS • Training records • Snapshot of other TTM roles • Worksite zones (advance warning, direction and protection, end of works) 	<ul style="list-style-type: none"> • No assessment required 	<ul style="list-style-type: none"> • Not required 	<p>Options for delivery</p> <p>Facilitated session delivered by CoPTTM Trainer with gap analysis</p> <p>You tube video with gap analysis</p> <p>Refresher</p> <ul style="list-style-type: none"> • No refresher workshop • Refreshed by briefing from STMS on changes to CoPTTM which impact activities 	

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<ul style="list-style-type: none"> • STMS - number of worksites and travel times • What non-STMS roles can / can't do • Explanation of CAR/WAP • The process <ul style="list-style-type: none"> ○ TMP Designer prepares TMP ○ TMP approved by RCA ○ Once approved STMS sets up worksite ○ Completes onsite record ○ STMS may delegate to TC under certain circumstances – STMS must check site daily ○ Auditing of TTM at worksite • Responsibilities for audits • Explanation of NNC process and potential consequences • Document control • Summary of CoPTTM requirements • Where to find out more information 			<p>undertaken by the organisation</p> <p>Time</p> <ul style="list-style-type: none"> • 2 hours <p>Related Unit standard</p> <ul style="list-style-type: none"> • None
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
<ul style="list-style-type: none"> • During the session, complete a gap analysis for their organisation using a form listing the systems they must have and the key requirements they must meet 	<ul style="list-style-type: none"> • Self-assessment with peer/trainer feedback 	<ul style="list-style-type: none"> • No pass criteria 	

3. Profile – TTM Worker

Block of learning:	TTM worker	Who it is for:	A worker who assists with TTM under direction (eg puts signs and cones out, assists with stop/go)
Prerequisite:	General worker		
Competency objective	<ul style="list-style-type: none"> • Knowledge of TTM Worker – Role and Responsibility • Skills in performing the TTM Worker role 		
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
Health and safety: <ul style="list-style-type: none"> • Identify / recognise correct PPE 	<ul style="list-style-type: none"> • Visual check – STMS / TTM Verifier • Hi Vis worn correctly 	<ul style="list-style-type: none"> • Not required 	Briefing delivered by: TTM Mentor Note about learning Much of the leaning will be informal while on the road. Also, a reader/writer to be supplied if required The order of completing the knowledge and skill elements can be changed to suit the organisation/learning of the TTM Worker, but all items in the knowledge and
TTM Worker training may be completed straight after the General Worker training TTM Knowledge <ul style="list-style-type: none"> • No go zones (including safety zones) • Manual handling/lifting of TTM equipment • Using a Stop/Go paddle • Using radio communications • Set out TTM equipment • The role of a 'spotter' • Interaction with people (good/bad practises and dealing with conflict) 	<ul style="list-style-type: none"> • Written questionnaire <ul style="list-style-type: none"> ○ Reporting ○ Responsibilities ○ Safety zones • Real-life situational experiences and scenarios • TTM Verifier determines if knowledge requirement has been met 	<ul style="list-style-type: none"> • 100% • Open book • Resits allowed 	
<ul style="list-style-type: none"> • About TMP (TMP for each site, includes text and diagram. Worksite set out as per TMP) 			

Proposed Training and Competency Model

<p>Worksite rules:</p> <ul style="list-style-type: none"> • Site Traffic movements – V.M.P (vehicle management plan) 			<p>skill sections of the profile must be covered</p> <p>Refresher</p> <ul style="list-style-type: none"> • No refresher workshop • Refreshed by briefing from STMS <p>Time</p> <ul style="list-style-type: none"> • 2 hours theory/ knowledge (plus on-site practical) <p>Related unit standards</p> <ul style="list-style-type: none"> • US 20878
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	
<p>TTM Worker practical</p> <ul style="list-style-type: none"> • Handling equipment • Comms/radio (RT) • Working on a TTM equipment vehicle 	<ul style="list-style-type: none"> • Completed on site (or in yard) • TTM Verifier determines if the candidate is competent 	<ul style="list-style-type: none"> • Meets minimum standard 	
<ul style="list-style-type: none"> • Using a Stop/Go paddle 	<ul style="list-style-type: none"> • Completed on site • TTM Verifier determines if the candidate is competent 	<ul style="list-style-type: none"> • Meets minimum standard 	

4. Profile – Mobile Operation Driver

Block of learning:	Mobile operation driver	Who it is for:	Drivers of vehicles in mobile operations Includes drivers of TTM work vehicle, shadow vehicle (with or without a TMA), lead pilot vehicle or tail pilot vehicle with or without AWVMS Note: Deck crew complete TTM Worker training	
Prerequisite:	TTM Worker			
Competency objective	<ul style="list-style-type: none"> • Knowledge of relevant CoPTTM requirements for mobile operations • Able to safely operate a vehicle in mobile operations in level 1 and level 2/3 roading environments 			
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
Knowledge <ul style="list-style-type: none"> • Health and safety processes relevant for the role • Knowledge of relevant CoPTTM requirements for mobile operations (requirements for LV, L1 and L2 under 65km/h and also requirements for L2 over 65km/h and L3) • Roles of drivers of tail pilot, shadow, work vehicles and reasons why they are important • Work methodologies for mobile operations • Completing vehicle checks (COF, RUC, seat belts, operation arrowboard, LAS, AWVMS, appropriate signage eg PASS WITH CARE) • Use of horizontal arrowboard • Use of LAS • Use of AWVMS 	<ul style="list-style-type: none"> • NZTA issued workbook with specific information, detailing competencies, knowledge and standards that must be reached TTM Verifier determines if the candidate has met the knowledge requirement	<ul style="list-style-type: none"> • 100% of all scenarios meet the standards • Each scenario to have criteria for sign off • Open book • Resits allowed 	Briefing delivered by: TTM Mentor Refresher <ul style="list-style-type: none"> • Not required • Documented briefing by STMS required on relevant changes to CoPTTM Time <ul style="list-style-type: none"> • Up to 4 hours plus on job practical 	

Proposed Training and Competency Model

<ul style="list-style-type: none"> • Operation of devices (eg strobes, LAS, hazard lights, indicators, head lights) • Mobile operation distances • Positioning of work, shadow and pilot vehicles (eg relative to crests/curves) • Communication with other members of the operation (timely, effective, using RT) • Protecting personnel on foot • Taking a lane • Dealing with common situations (eg emergency vehicles passing mobile operation) • Issues with mobile operations (eg blocking lane and causing issues with passing traffic) • Reporting crashes and completing or assisting with an incident report where required (eg for vehicle crashes) • Record keeping (onsite records, log books etc) 			<p>Related Unit standard</p> <ul style="list-style-type: none"> • Unit standard to be developed <p>Note: Evidence may be provided by questioning, demonstration, scenarios</p> <p>Also, a reader/writer to be supplied if required</p>
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
<p>Skills</p> <p>Reporting crashes and completing or assisting with an incident report where required (eg for vehicle crashes) Assessment for level LV, level 1 and level 2 under 65km/h</p> <p>Check vehicles (eg COF, RUC, seat belts, operation of arrowboard)</p> <ul style="list-style-type: none"> • Safely operate a work vehicle in a mobile operation 	<ul style="list-style-type: none"> • NZTA issued workbook with specific information, detailing competencies and skills that must be reached • TTM Verifier determines if the candidate is competent 	<ul style="list-style-type: none"> • Must meet 100% of the standards for the minimum range of TTM situations • Open book • Resits allowed • Warrant issued for: <ul style="list-style-type: none"> - Level LV, level 1 and level 2 under 65km/h - level 2 over 65km/h and level 3 	

Proposed Training and Competency Model

<ul style="list-style-type: none">• Safely operate a shadow vehicle in a mobile operation• Safely operate a tail pilot vehicle in a mobile operation• Safely operate a lead pilot vehicle in a mobile operation <p>Assessment for level 2 over 65km/h and level 3</p> <ul style="list-style-type: none">• Check vehicles (eg COF, RUC, seat belts, operation of arrowboard, LAS, AWVMS)• Safely operate a work vehicle in a mobile operation• Safely operate a shadow vehicle with TMA in a mobile operation• operation of TMA (including putting pad up and down between sites close together eg 600m)• Safely operate a tail pilot vehicle with AWVMS in a mobile operation• Safely operate a lead pilot vehicle in a mobile operation			
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5. Profile – Traffic Controller (TC)

Block of learning:	TC	Who it is for:	The qualified person on level LV and level 1 roads who: <ul style="list-style-type: none"> • Assists with deployment of the operation • Maintains the site within existing TTM phase while the STMS is away from worksite. <p>Note: The TC will only be able to assist an STMS installing, modifying or removing TTM at a worksite</p>	
Prerequisite:	TTM Worker			
Competency objective	Knowledge and skills to maintain existing static LV and L1 worksites within the current phase while the STMS is away from worksite.			
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
<ul style="list-style-type: none"> • Health and safety processes relevant for the role • Knowledge of basic CoPTTM for TC <i>(for further information, refer to Appendix 3: Additional information for profiles)</i> • Follow briefing • Follow and read TMP (including contingency) • Monitor operation (including queuing) • Complete paperwork • Dealing with common worksite situations • Dealing with the public (verbal/communication skills) • Identify risks and manage incidents 	<ul style="list-style-type: none"> • Knowledge tests during training • Scenarios dealing with common worksite situations - can complete multiple times if required 	<ul style="list-style-type: none"> • 80% pass 	<p>Workshop delivered by: CoPTTM Trainer</p> <p>Refresher</p> <ul style="list-style-type: none"> • 3-year Refresher on CoPTTM changes delivered by CoPTTM trainer • 3-year reassessment of practical <p>Time</p>	

Proposed Training and Competency Model

<ul style="list-style-type: none"> • Basic risk assessment • Communication (radio, when to contact STMS) • Take corrective actions (to make site safe) • Working with staff (eg providing direction, reinforcing performance) • Site access / Briefing visitors • Preserving safety zones • Manage MTC activities • Maintain pedestrian/cyclist facilities • Understand resource management • Understanding of inspection activity 			<ul style="list-style-type: none"> • 1-day theory/ knowledge workshop delivered by CoPTTM Trainer • Plus on-site practical <p>Related unit standards</p> <ul style="list-style-type: none"> • US 5627
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
<p>Must MAINTAIN at least 1 closure from each activity type listed below. One of the closures must include footpath or cyclist control.</p> <ol style="list-style-type: none"> 1. Shoulder closure, berm or footpath control 2. Lane merge, lane shift, cycle lane, priority control and TSL 3. MTC 	<ul style="list-style-type: none"> • Complete a minimum of 1 closure from each activity type. One of the closures must include footpath or cyclist control • TTM Verifier determines if the candidate is competent On-job experience with own company • Record of practice and experience 	<ul style="list-style-type: none"> • 100% sign off <p>Note: Must be competent in all elements before receiving warrant</p> <p>Note: There is no time limit for when practical assessment must be completed. Must refresh knowledge 3 yearly</p>	
<p>If not covered during the verified closures, complete the following:</p> <ul style="list-style-type: none"> • Brief visitors • Identify risks and take corrective actions (to make site safe) 			

6. Profile – Inspector

Block of learning:	Inspector	Who it is for:	A person carrying out inspection activities Note: This may include surveyors, staff working on their own, and people doing simple roadside activities provided their work fits within the range of inspection activities	
Prerequisite:	No prerequisite			
Competency objective	<ul style="list-style-type: none"> This qualification enables the holder, once briefed by the STMS, to undertake inspections 			
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
Health and safety: Identify / recognise correct PPE	<ul style="list-style-type: none"> Visual check onsite – CoPTTM Assessor Hi Vis worn correctly 	Correctly wearing all PPE as per site requirements		
<ul style="list-style-type: none"> About the Inspector role About CoPTTM Framework for TTM relating to inspections Principles of CoPTTM Knowledge of basic CoPTTM for inspections <i>(for further information, refer to Appendix 3: Additional information for profiles)</i> Hazard identification (potential hazards within the worksite/road environment) Briefing of TTM personnel (eg spotters and observers) Emergency procedures 	<ul style="list-style-type: none"> Knowledge tests during training Scenarios dealing with common inspection situations - can complete multiple times if required 	<ul style="list-style-type: none"> 100% pass 	Workshop delivered by: NZTA approved Trainer Refresher <ul style="list-style-type: none"> No refresher workshop Refreshed by briefing from STMS 3-year reassessment of practical 	

Proposed Training and Competency Model

<ul style="list-style-type: none"> • Working around inspection vehicle • No go zones • Acting as spotter for person on the lane 			<p>Time</p> <ul style="list-style-type: none"> • 1-day theory/ knowledge
<p>On Job practical – skill elements to be covered</p>	<p>Assessment method</p>	<p>Pass Criteria</p>	<ul style="list-style-type: none"> • Plus on-site practical
<p>Back at work assessment</p> <ul style="list-style-type: none"> • Undertake 1 inspection activity (including paperwork) for Level 1 • Undertake 1 inspection activity (including paperwork) for Level 2 • Undertake 1 inspection activity (including paperwork) for Level 3 	<ul style="list-style-type: none"> • Observed by CoPTTM Assessor • Must undertake 1 inspection activity (including paperwork) for each road level they will be working on • CoPTTM Assessor determines if the candidate is competent 	<ul style="list-style-type: none"> • 100% to standard 	<p>Related unit standards</p>

7. Profile – Universal Site Traffic Management Supervisor (STMS)

Block of learning:	Universal STMS	Who it is for:	This is the base level to becoming: <ul style="list-style-type: none"> • STMS - The person who will be supervising the setup, change and removal of a worksite to a predetermined plan • Traffic Operations Manager. • TTM Mentor, TTM Verifier, CoPTTM Assessor or CoPTTM Trainer • TMP Designer, Auditor, TMC and Corridor Manager 	
Prerequisite:	Mobile operation driver (for those wanting to hold the one of the STMS warrants) TC Knowledge (Certificate of knowledge)			
Competency objective	<ul style="list-style-type: none"> • Health and safety processes relevant for the role • Knowledge of their role and responsibility <p>In both night and day conditions:</p> <ul style="list-style-type: none"> • Lead and give direction to their crew and visitors • Understanding the TMP • Understanding the principles of TMP implementation • Understand contingency plans • Ability to assess risk (decide what it is and severity) • Add content from CoPTTM that is common to all levels 			
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
Knowledge <ul style="list-style-type: none"> • The STMS role 	During learning	<ul style="list-style-type: none"> • 90% of all scenarios meet the standards 	Workshop delivered by: CoPTTM Trainer	

Proposed Training and Competency Model

<ul style="list-style-type: none"> • Basic leadership (anticipation, planning, maintaining standards, delegation, safety for the team and others, supervision) • Understand the minimum requirements of a site safety briefing/induction • Knowledge of TMP • Knowledge of onsite records and other forms • Have a thorough knowledge of CoPTTM principles • Basic understanding of risk assessment and treatment • Understand contingency scenarios • Complete audit of worksite • Briefing on On-Job practical – skill elements (workbook) to be completed 	<ul style="list-style-type: none"> • Given a scenario identify the key elements for a site safety briefing/induction • Given a scenario, complete an on-site record • Given a scenario, successfully identify risks and treatments required • Demonstrate knowledge of key principles for the setup, monitoring, maintenance and removal of TTM • Identify suitable contingency plan for a given scenario • Use CoPTTM to answer questions and provide references *will need to describe a scenario and then predefine the core elements within it • Then establish tolerance for pass criteria 	<ul style="list-style-type: none"> • Each scenario to have criteria of competence • Open book • Resits allowed 	<p>Time</p> <ul style="list-style-type: none"> • 2 days for both knowledge and skills • Knowledge component delivered by CoPTTM Trainer • Assessment complete by TTM Verifier <p>Unit standard</p> <ul style="list-style-type: none"> • To be amended <p>Refresher</p> <p>Any Changes to CoPTTM relating to universal STMS content will be included in the L1, L2 under 65km/h and the L2 over 65km/h and L3 refreshers</p>
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
<p>Skills</p> <ul style="list-style-type: none"> • Navigate CoPTTM, be able to find the answer/reference or know where to source the information • Be able to understand key components of a plan and check that a plan is suitable (Advance warning, direction protection, end of works, contingencies and layout distances) • Ability to identify, assess and manage risk (do something about it) 	<p>No ONSITE practical skill assessment required for the universal STMS. The following skills are demonstrated in a classroom setting:</p> <ul style="list-style-type: none"> • Given a situation, prepare and deliver a generic safety induction/prestart • Given a series of CoPTTM related topics identify the correct section of CoPTTM to apply 	<ul style="list-style-type: none"> • 90% of all scenarios meet the standards • Each scenario to have criteria of competence • Open book • Resits allowed 	

Proposed Training and Competency Model

<ul style="list-style-type: none"> • Ability to plan a deployment / site setup and calculate resources • Complete an audit of a worksite 	<ul style="list-style-type: none"> • Given a scenario and a TMP, identify the suitability of the plan by comparing key information (eg advance warning, direction protection, end of works, contingencies and layout distances) • Use the layout distances table to calculate resources needed • Given a scenario (eg photo examples, workers working at a site access point) identify significant risks and appropriate mitigations • Complete an audit of a worksite 		
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8. Profile – STMS level LV and level 1

Block of learning:	STMS level LV and level 1	Who it is for:	A person who has achieved universal STMS competency, who is intending to be the STMS on level LV and level 1 roads
Prerequisite:	Universal STMS, must be TC warranted to complete the practical component for this qualification STMS is required to have endorsements for specialist activities / specialist TTM equipment (eg portable traffic signals, VMS) if in charge of operations using these and there is no other worker on site with the required endorsements		
Competency objective	<ul style="list-style-type: none"> • Knowledge of specific level LV and L1 key elements • Skills to competently operate within a level LV and L1 road environment 		
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
<ul style="list-style-type: none"> • Health and safety processes relevant for the role Level LV and L1 specific information on: <ul style="list-style-type: none"> • Static operations • Mobile operations and closures • Semi static operations and closures • Inspections / special activities • Equipment • Emergency & incident response scenarios 	<ul style="list-style-type: none"> • NZTA issued workbook with specific information, detailing competencies, knowledge and standards that must be reached • Assessment to deal with simple and complex environments TTM Verifier determines if knowledge requirement has been met	<ul style="list-style-type: none"> • 100% of all scenarios meet the standards • Each scenario to have criteria for sign off • Open book • Resits allowed 	Completed as part of a 1-day workshop with back at work practical Workshop delivered by: CoPTTM Trainer Refresher <ul style="list-style-type: none"> • 3-year Refresher on CoPTTM changes delivered by CoPTTM trainer (includes any changes to Universal STMS content)

Proposed Training and Competency Model

			<ul style="list-style-type: none"> • 1 day maximum <p>Time - NA</p> <p>Related Unit standard</p> <ul style="list-style-type: none"> • US 5628 <p>Note: Evidence may be provided by questioning, demonstration, scenarios etc</p> <p>Identify the risk factors that are inherent in a Level LV and L1 road</p>
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
<p>Level LV and L1 specific on the job skills to be verified:</p> <ul style="list-style-type: none"> • Deliver a site safety briefing/induction • Static operations (including stop/go) • Mobile operations and closures • Semi static operations and closures • Inspections / special activities 	<ul style="list-style-type: none"> • NZTA issued workbook with specific information, detailing competencies and skills that must be reached • Assessment to deal with simple and complex environments <p>TTM Verifier determines if the candidate is competent</p>	<ul style="list-style-type: none"> • Must meet 100% of the standards for the minimum range of TTM situations • Open book • Resits allowed <p>Profile requires company to provide statement assuring of competency, and to support and inform this it would sensible for companies to record all audits indicating staff performance</p> <p>As part of ROPEs process, the RCA could be asked to verify</p>	<p>Note: A conscious decision has been made not to make a formal assessment, this is to be monitored</p> <p>Range of TTM situations could include:</p> <ul style="list-style-type: none"> • Shoulder closure • Live lane closure under 65km/h

		<p>records, and/or support / decline the statement of competency.</p> <p>TTM Verifier to assess competence during for level LV and level 1 ROPE process</p>	<ul style="list-style-type: none"> • Live lane closure over 65km/h • Multilane closure <p>Must complete 3 closures from the list of possible closures</p> <ul style="list-style-type: none"> • One of the closures must be MTC • One of the closures must deal with either pedestrian or cyclist management • Only one of the closures can be a shoulder closure • One closure must be over 65km/h • One closure must be under 65km/h <p>Timeframe As required</p> <p>Refresher</p>
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Proposed Training and Competency Model

			<p>Company to provide statement of competency (including performance monitoring issues, NNC etc) at the time of universal refresher. Company is responsible for maintaining internal staff competency</p> <p>The individual can either provide an application for a ROPE, or be reassessed. Both to be assessed by a TTM Verifier</p>
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9. Profile – STMS level 2 under 65km/h

Block of learning:	STMS Level 2 under 65km/h	Who it is for:	A person who has achieved universal STMS competency, who is intending to be the STMS on Level 2 roads under 65km/h
Prerequisite:	Universal STMS, must be TC competent to complete the practical component for this qualification STMS is required to have endorsements for specialist activities / specialist TTM equipment (eg portable traffic signals, VMS) if in charge of operations using these and there is no other worker on site with the required endorsements		
Competency objective	<ul style="list-style-type: none"> • Knowledge of specific level 2 key elements • Skills to competently operate within Level 2 under 65km/h road environment 		
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
<ul style="list-style-type: none"> • Health and safety processes relevant for the role Level 2 under 65km/h specific information on: <ul style="list-style-type: none"> • Deliver a site safety briefing/induction • Static operations • Mobile operations and closures • Semi static operations and closures • Inspections / special activities • Equipment • Emergency & incident response scenarios 	<ul style="list-style-type: none"> • NZTA issued workbook with specific information, detailing competencies, knowledge and standards that must be reached • Assessment to deal with simple and complex environments • TTM Verifier determines if knowledge requirement has been met and furnishes statement that candidate has met knowledge requirement to the CoPTTM Assessor 	<ul style="list-style-type: none"> • 100% of all scenarios meet the standards • Each scenario to have criteria for sign off • Open book • Resits allowed 	Completed as part of a 1-day workshop with back at work practical Workshop delivered by: CoPTTM L2/3 Trainer Refresher <ul style="list-style-type: none"> • 3-year Refresher on CoPTTM changes delivered by L2/3 CoPTTM trainer (includes any changes to

Proposed Training and Competency Model

			<p>Universal STMS content)</p> <ul style="list-style-type: none"> • 1 day maximum <p>Time</p> <ul style="list-style-type: none"> • <p>Related Unit standard</p> <ul style="list-style-type: none"> • <p>Note: Evidence may be provided by questioning, demonstration, scenarios etc</p> <ul style="list-style-type: none"> • Identify the risk factors that are inherent in a level 2 road under 65km/h
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	
<p>Level 2 under 65km/h specific on the job skills to be verified:</p> <ul style="list-style-type: none"> • Static operations (including stop/go) • Mobile operations and closures • Semi static operations and closures • Inspections / special activities 	<ul style="list-style-type: none"> • NZTA issued workbook with specific information, detailing competencies and skills that must be reached • Assessment to deal with simple and complex environments • TTM Verifier determines if the candidate is competent and furnishes a statement of competence to the CoPTTM Assessor CoPTTM Assessor to assess a minimum of 1 deployment from a range of approved 	<ul style="list-style-type: none"> • Must meet 100% of the standards for the minimum range of TTM situations • Open book • Resits allowed <p>Profile requires company to provide statement assuring of competency, and to support and inform this it would sensible for companies to record all audits indicating staff performance</p>	<p>Range of TTM situations could include:</p> <ul style="list-style-type: none"> • Shoulder closure under 65km/h • Live lane closure under 65km/h

	<p>closures under 65km/h (excluding shoulder closure)</p>	<p>As part of ROPEs process, the RCA could be asked to verify records, and/or support / decline the statement of competency.</p>	<ul style="list-style-type: none"> • Multi Lane closure under 65km/h <p>Compulsory operation – MTC under 65km/h</p> <p>Timeframe As required</p> <p>Refresher Company to provide statement of competency (including performance monitoring issues, NNC etc) at the time of universal refresher. Company is responsible for maintaining internal staff competency</p> <p>The individual can either provide an application for a ROPE, or be reassessed.</p>
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10. Profile – STMS level 2 over 65km/h and level 3

Block of learning:	STMS level 2 over 65km/h and level 3	Who it is for:	A person who has achieved universal STMS competency, who is intending to be the STMS on level 2 over 65km/h and level 3 roads	
Prerequisite:	Universal STMS, must be TC warranted to complete the practical component for this qualification STMS is required to have endorsements for specialist activities / specialist TTM equipment (eg portable traffic signals, VMS) if in charge of operations using these and there is no other worker on site with the required endorsements			
Competency objective	<ul style="list-style-type: none"> • Knowledge of specific level 2 over 65km/h and level key elements • Skills to competently operate within level 2 over 65km/h and level 3 road environment 			
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
<ul style="list-style-type: none"> • Health and safety processes relevant for the role <p>Level 2 over 65km/h and level 3 specific information on:</p> <ul style="list-style-type: none"> • Deliver a site safety briefing/induction • Static operations • Mobile operations and closures • Semi static operations and closures • Inspections / special activities • Equipment • Level 2 under 65km/h roads around interchanges and detours (to be kept brief) • Emergency & incident response scenarios 	<ul style="list-style-type: none"> • NZTA issued workbook with specific information, detailing competencies, knowledge and standards that must be reached • Assessment to deal with simple and complex environments <p>TTM Verifier determines if knowledge requirement has been met and furnishes statement that candidate has met knowledge requirement to the CoPTTM Assessor</p>	<ul style="list-style-type: none"> • 100% of all scenarios meet the standards • Each scenario to have criteria for sign off • Open book • Resits allowed 	<p>Completed as part of a 1-day workshop with back at work practical</p> <p>Workshop delivered by: CoPTTM L2/3 Trainer</p> <p>Refresher</p> <ul style="list-style-type: none"> • 3-year Refresher on CoPTTM changes delivered by L2/3 CoPTTM trainer (includes any changes to Universal STMS content) • 1 day maximum 	

Proposed Training and Competency Model

			<p>Time</p> <p>Related Unit standard</p> <p>Note:</p> <p>We envisage this to encompass level 2 under 65km/h roads around interchanges and detours</p> <p>Evidence may be provided by questioning, demonstration, scenarios etc</p> <ul style="list-style-type: none"> Identify the risk factors that are inherent in level 2 over 65km/h and level 3 roads
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
<p>Level 2 over 65km/h and level 3 specific on the job skills to be verified:</p> <ul style="list-style-type: none"> Static operations Mobile operations and closures Semi static operations and closures Inspections / special activities 	<ul style="list-style-type: none"> NZTA issued workbook with specific information, detailing competencies and skills that must be reached Assessment to deal with simple and complex environments TTM verifier determines if the candidate is competent and furnishes a statement of competence to the CoPTTM Assessor CoPTTM Assessor to assess a minimum of 1 	<ul style="list-style-type: none"> Must meet 100% of the standards for the minimum range of TTM situations Open book Resits allowed <p>Profile requires company to provide statement assuring of competency, and to support and inform this it would sensible for companies to record all</p>	<p>Range of TTM situations on level 2 over 65km/h and level 3 roads could include:</p> <ul style="list-style-type: none"> Shoulder closure Live lane closure MTC Rolling block Chicane

Proposed Training and Competency Model

	<p>deployment from a range of approved closures (excluding shoulder closure)</p>	<p>audits indicating staff performance</p> <p>As part of ROPE process, the RCA could be asked to verify records, and/or support / decline the statement of competency.</p>	<ul style="list-style-type: none"> • Ramp closure • Multi Lane closure <p>Timeframe As required</p> <p>Refresher Company to provide statement of competency (including performance monitoring issues, NNC etc) at the time of refresher. Company is responsible for maintaining internal staff competency</p> <p>The individual can either provide an application for a ROPE, or be reassessed.</p>
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11. Profile – Traffic Operations Manager

Block of learning:	Traffic Operations Manager (TOM)	Who it is for:	A person who manages multiple TTM crews for a company (NOTE – this is an optional role – not all companies will have a TOM)	
Prerequisite:	Should be STMS knowledge qualified for the level of road that their crews are operating on			
Competency objective	<ul style="list-style-type: none"> To ensure that the TTM crews remain CoPTTM compliant as they complete their activities 			
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
<ul style="list-style-type: none"> This role varies from company to company No formal training will be provided Recommend that Traffic Operations Managers be TTM knowledge qualified for the level of road that their crews are operating on 				
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.	

12. Profile – Use of specialist TTM equipment on-site

Block of learning:	Use of specialist TTM equipment on-site	Who it is for:	The STMS at worksites using the specialist equipment (portable traffic signals, VMS).	
Prerequisite:	Universal STMS			
Competency objective	Personnel using the equipment has the knowledge and skills to deploy and operate the equipment Eg: <ul style="list-style-type: none"> • STMS managing the deployment • Personnel programming and operating the equipment Note: For each item of specialist equipment there will be a separate profile			
Knowledge and skills of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
<ul style="list-style-type: none"> • Health and safety processes relevant for the role Portable Traffic signals <ul style="list-style-type: none"> • List of equipment they can use and supplier Barriers <ul style="list-style-type: none"> • Gain minimum qualification and get detailed information from supplier VMS <ul style="list-style-type: none"> • Specifications for types of VMS are specified in CoPTTM and P37 	<ul style="list-style-type: none"> • Check that equipment meets specification • Check that equipment is correctly installed • Check that it is being operated and maintained correctly 	<ul style="list-style-type: none"> • Company to manage this competency • NZTA with suppliers are developing training material for barriers and portable traffic signals 	Workshop delivered by: Manufacturer of equipment Refresher <ul style="list-style-type: none"> • No refresher workshop • Refreshed by briefing from STMS Note: Further development required	

Proposed Training and Competency Model

On Job practical – skill elements to be covered	Assessment method	Pass Criteria	
<ul style="list-style-type: none"> • This training is for warranted STMS, who will be operating the specialist equipment • Company responsibility 	<ul style="list-style-type: none"> • Company audit / supervising approach (TTM Verifier to confirm 2 examples of satisfactory deployment for each device type used) • TTM Verifier determines if the candidate is competent 	<p>Correctly meets the requirements of the equipment checklist and the TMP</p>	

13. Profile – Other specialist activities

Block of learning:	Specialist Activities (eg Traffic signals, Sealing, Road marking, Barriers)	Who it is for:	For TMP Designer and STMS who is involved in planning and delivering the TTM aspects of the event. Note: A major event may require specialist TTM advice from a qualified person (eg traffic engineer). Optional for event manager and other key staff	
Prerequisite:	Universal STMS and appropriate road level certificates/warrant			
Competency objective	<ul style="list-style-type: none"> • Knowledge of minimum timeframes for permits and applications • TMP Designer knows key elements of setup appropriate to the environment • STMS in charge of event needs to know how to compliantly implement the plan • Knowledge for event manager and other key staff 			
Knowledge and skills of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
<ul style="list-style-type: none"> • Health and safety processes relevant for the role • Knowledge of key elements of CoPTTM methodologies that impact on the planning of the event • Knowledge of specific requirements for the type of activity and environment the operation is being held in (eg section I) • Knowledge of minimum timeframes for permits and applications • Understanding of requirements to successfully run the activity compliantly as per plan 	<ul style="list-style-type: none"> • NZTA issued workbook with specific information, detailing knowledge, skills, and standards that must be reached • TTM Verifier determines if knowledge requirement has been met 	<ul style="list-style-type: none"> • 100% of all scenarios meet the standards • Each scenario to have criteria for sign off • Open book • Resits allowed 	<p>Workshop delivered by: NZTA approved Trainer</p> <p>Refresher</p> <ul style="list-style-type: none"> • No refresher workshop • Refreshed by briefing from STMS <p>Note:</p>	

Proposed Training and Competency Model

<p>Level 1 specific information on:</p> <ul style="list-style-type: none"> • Static operations • Mobile operations and closures • Semi static operations and closures • Inspections / special activities • Equipment 			<p>Events could include</p> <ul style="list-style-type: none"> • Cycling • Running • Walking • Triathlon • Parade • Concert • Anzac parade • Wine festival • Etc <p>Other activities could include: Traffic signals modifications/maintenance, Sealing, Road marking</p>
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	
<ul style="list-style-type: none"> • No practical assessment because of variability of activity type and difficulty of assessing across a wide range of environments • TMP Designer and other TTM personnel will already be competent STMS • Recommend activity experience is built up under competent Events STMS and thoroughly briefed and monitored by certified/warranted STMS 	<ul style="list-style-type: none"> • 		

14. Profile – TMP Designer

Block of learning:	TMP Designer	Who it is for:	<p>STMS certified/warranted person who develops and submits TMPs for approval. This person will also brief the onsite STMS in charge of the site about the TMP.</p> <p><i>Also includes specialist activities and specialist equipment as required. For example, Event management</i></p>	
Prerequisite:	<p>Participants do not need to complete General worker learning block</p> <p>TTM Worker and TC (minimum knowledge component)</p> <p>Universal STMS</p> <p>STMS (minimum knowledge component) for the level of road they will be developing TMPs for (LV/L1 and/or L2 under 65km/h and/or L2 over 65km/h and L3)</p> <p>Designer expected to acquire endorsements for specialist activities (eg traffic signals, sealing and road marking) / specialist TTM equipment (eg portable traffic signals, VMS) if utilising within a TMP</p> <p>Experience in (or observation of) installation, maintenance and removal of TTM for level of TTM</p>			
Competency objective	<p>Knowledge sufficient to understand key design inputs into a TMP</p> <p>Skills to put together a viable TMP</p> <p>Design a TMP that is:</p> <ul style="list-style-type: none"> • Compliant with CoPTTM (could include EEDs) • Usable by STMS • Suitable/applicable to the activity and the site • Adequately balanced between competing needs 			
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
<ul style="list-style-type: none"> • Health and safety processes relevant for the role 	<ul style="list-style-type: none"> • Attendance at 3-day workshop (immersed in design TMP) 	<ul style="list-style-type: none"> • Pass or fail to a marking template 	<p>Workshop delivered by:</p>	

Proposed Training and Competency Model

<ul style="list-style-type: none"> • Know the TMP development procedure (for further information, refer to Appendix 3: Additional information for profiles) • Find requirements for: <ul style="list-style-type: none"> ○ Road network (including overweight/over dimension routes) ○ Local conditions • Understand site and activity requirements for the work specific activity • Multi-lane TTM (especially high speed) - understanding of geometry, and accommodating lane widths at lateral shift • Traffic delay counts • Contingency (risk) • Temporary transport facilities • Know when TTM barriers are required • Create TMD • Develop TMP 	<ul style="list-style-type: none"> • Complete TMP progressively during the workshop – signed off by trainer 		<p>NZTA approved Trainer</p> <p>Refresher</p> <ul style="list-style-type: none"> • Required if TMP requirements significantly changed – NZTA to determine • Must complete STMS refresher for levels of TTM <p>Time</p> <ul style="list-style-type: none"> • 3-day workshop • Plus practical exercises
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	
<ul style="list-style-type: none"> • Develop 3 real life TMPs including TMDs covering a range of activities (one TMP must be for a complex situation) • One TMP to be for activity stipulated by NZTA 	<ol style="list-style-type: none"> 1. On job experience with own company 2. Record of the TMPs the Designer has developed. Needs to be shown on the TMP as person drafting the TMP (consider adding a <i>TMP Drafted by ...</i> field to the TMP5 verified deployed TMPs signed off by TTM Verifier 	<ol style="list-style-type: none"> 1. Pass criteria 2. Sighted by CoPTTM Assessor 3. Sighted by CoPTTM Assessor <ul style="list-style-type: none"> • 80% of TMPs meet assessment criteria/are fit for purpose 	

	<ul style="list-style-type: none"> • Submit 3 TMPs for assessment (one TMP must be for a complex situation) • The initial version of the TMP and also the final approved version of the TMP needs to be submitted for assessment. • • For each worksite, include the following: <ul style="list-style-type: none"> - Feedback from the warranted STMS who installed the TTM at the worksite - On-site records (maximum of 5) - A video drive through of the TTM installed at the worksite - Any audits/reviews completed on the worksite. • TMPs assessed by CoPTTM Assessor • On reassessment, if the applicant fails to demonstrate adequate evidence then they pay the reassessment fee. 	<p>All fundamental elements demonstrated, lessons learnt, and CoPTTM Assessor must be confident that Installation Designer can design well considered, safe, viable TMPs that require no or minimal modifications on site.</p>	
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15. Profile – TTM Audit

Block of learning:	TTM Auditor	Who it is for:	STMS certified/warranted person who assesses worksites (static and mobile) to support continuous improvement and identify and report on poor performance
Prerequisite:	Knowledge qualified to level of road auditing on (TTM Worker, TC, Universal STMS and STMS for level of road they are auditing on) Knowledge of specialist activities/equipment (eg event, KCTL, road markers, portable traffic signals) <i>Desirable to have attended TMP Designer workshop</i>		
Competency objective	<ul style="list-style-type: none"> • Consistent and fair assessment of sites relative to approved TMP or CoPTTM where TMP not applicable • Be able to give feedback and take follow up actions to improve safety and functionality of site to allow work to continue safely wherever appropriate 		
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
<ul style="list-style-type: none"> • Health and safety processes relevant for the role • Know the auditing principles • Know the audit process • Read and understand TMP • Know related legislation • Know how to complete an inspection (cover relevant parts of inspection as they relate to audits) • Know how to complete the site condition rating (SCR) • Know CoPTTM references for Audit items • Know how to apply the assessment criteria to get consistency of assessments 	<ul style="list-style-type: none"> • Completing SCR using video of sites (static and mobile) • On site assessment with a 1:4 ratio (may be completed later if a lower ratio is required) 	<ul style="list-style-type: none"> • Must identify all critical issues onsite and at least 80% of the other issues • Correct final result 	<p>Workshop delivered by: NZTA approved Trainer</p> <p>Refresher</p> <ul style="list-style-type: none"> • Practical refreshed every 3 years • Must complete STMS refresher for levels of TTM • Auditors should not be only reliant on

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<ul style="list-style-type: none"> • Communication with and feedback to the warranted person on-site (including how to provide constructive feedback, how to defuse anger, how to deal with conflict) • Know the audit strategies • Know their powers and the strategies for follow-up actions • Know how to issue notices and complete follow up actions • Know how to complete the paperwork • Know what corrective action plans need to be developed • Assessing • Know how to apply the escalation/contingency plans/actions • Know when TTM barriers are required • Complete SCR using video of site • Onsite practical completing SCRs 			<p>attending a refresher course. Expect regular/ongoing contact and revision of local requirements, CoPTTM and posted updates on the website</p> <p>Time</p> <ul style="list-style-type: none"> • 1-day training • Plus on-site practical <p>Related Unit standard</p> <ul style="list-style-type: none"> • US9705
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	
<ul style="list-style-type: none"> • Buddy up with an RCA approved TTM Mentor to complete at least 5 SCRs (including static and mobile operations) and follow up actions • 3 of the audits must involve work on the lane 	<ul style="list-style-type: none"> • TTM Mentor to sign-off Auditor • Trainee Auditor must be assessed competent on at least 3 of the audits they have completed 	<ul style="list-style-type: none"> • Identify 80% critical issues on-site • Correct final result • Paperwork actioned correctly • Constructive feedback 	

16. Profile – TMP Approver

Block of learning:	TMP Approver		Who it is for:	Approvers of TMPs on behalf of an RCA (including engineers who are approving TMPs)
Prerequisite:	<p>Participants do not need to complete General worker learning block</p> <p>TTM Worker and TC (minimum knowledge component)</p> <p>Universal STMS</p> <p>STMS (minimum knowledge component) for the level of road they will be approving TMPs for (LV/L1 and/or L2 under 65km/h and/or L2 over 65km/h and L3)</p> <p>TMP Designer</p> <p>Approver expected to acquire endorsements for specialist activities (eg Traffic signals, Sealing, Road marking) or specialist TTM equipment (eg portable traffic signals, VMS) if designing TMPs incorporating these</p> <p>Experience in (or observation of) installation, maintenance and removal of TTM for level of TTM</p>			
Competency objective	<ul style="list-style-type: none"> • Knowledge of their role and responsibility • Able to understand and approve TMPs that are: <ul style="list-style-type: none"> ○ Compliant with CoPTTM (could include EEDs) ○ Suitable/applicable to the activity and the road environment ○ Is safe and fit for purpose ○ Adequate detail for the STMS to use 			
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
<ul style="list-style-type: none"> • Health and safety processes relevant for the role • Understand site and activity requirements for the work specific activity • Know the TMP approval process <ul style="list-style-type: none"> ○ Review format of TMP 	<ul style="list-style-type: none"> • Attendance at 1-day workshop 	<ul style="list-style-type: none"> • Approved or declined 	<p>Workshop delivered by:</p> <p>NZTA approved Trainer</p> <p>Refresher</p> <ul style="list-style-type: none"> • Not required 	

<ul style="list-style-type: none"> ○ Establish scope of the work activity (speed of road, impact on lanes, level of road and location) ○ Review TMD(s) - do they address the impacts of the work activity ○ Does proposed TTM match CoPTTM requirements ○ Review TMP in detail (TSL approval, contingency plans, monitoring, other authorisations, detours, STMS details etc) ○ Check that all appropriate applications and consents for the work activity being undertaken (eg CAR, Road opening notice) ○ Check that all appropriate forms are attached or referenced (eg On-site record, generic TMP checklist) ○ Check that proposed work dates do not impact other worksites or conflict with network requirements ○ Decide the TMP is approved or declined and stamp it ○ If approved, attach reasonable special conditions and local conditions <ul style="list-style-type: none"> ● Stakeholder engagement ● Shared road reserves ● CAR/WAP process ● Network management ● Timeframes for processing TMPs (also reference the NZUAG) ● Road closure process 			<ul style="list-style-type: none"> ● Must complete STMS refresher for levels of TTM ● Approvers should not be only reliant on attending a refresher course. Expect regular/ongoing contact and revision of local requirements, CoPTTM and posted updates on the website <p>Time</p> <ul style="list-style-type: none"> ● 1-day workshop <p>Moderation</p> <p>NZTA will undertake moderation of TMP Approvers</p>
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<ul style="list-style-type: none"> • Local network conditions (including overweight/over dimension routes) • Be able to locate specific requirements in CoPTTM (to a higher degree than universal STMS) • EEDs • Know when TTM barriers are required • Traffic signals • Delay assessments • Practice exercises 			
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	
<ul style="list-style-type: none"> • First 5 TMPs involving work on the lane to be checked by an existing TMP Approver • Random selection and review of 5 other approved TMPs 	<ul style="list-style-type: none"> • Existing TMP Approver to complete checks (qualified verifier?) 	<ul style="list-style-type: none"> • Approval of TMPs are rated acceptable • Must have 3 TMP approvals rated as acceptable before being declared competent 	

17. Profile – Corridor Manager and TMC

Block of learning:	TMC and Corridor Manager	Who it is for:	Corridor managers and TMCs
Prerequisite:	<ul style="list-style-type: none"> • Participants do not need to complete General worker learning block • TTM Worker and TC (minimum knowledge component) • Universal STMS • STMS (minimum knowledge component) for the level of road they are responsible for (LV/L1 and/or L2 under 65km/h and/or L2 over 65km/h and L3) • TMP Designer • TMP Approver (if required to approve TMPs) • Desirable to complete the Audit and TMP Approver training as their work would be improved with this knowledge 		
Competency objective	<ul style="list-style-type: none"> • Knowledge of their role and responsibility • Be able to set network conditions and manage network activity to ensure CoPTTM and network compliance. 		
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
<ul style="list-style-type: none"> • Health and safety processes relevant for the role • Knowledge of CoPTTM to a higher level than a universal STMS • Know their roles and responsibilities • Know the requirements for the different activities conducted on the network • Shared road reserves • CAR/WAP process • Reporting network activity: <ul style="list-style-type: none"> ○ Weekly report ○ Daily report 	<ul style="list-style-type: none"> • Attendance at 1-day workshop • 	<ul style="list-style-type: none"> • 	<p>Workshop delivered by: NZTA approved Trainer</p> <p>Refresher</p> <ul style="list-style-type: none"> • Not required • Must complete STMS refresher for levels of TTM <p>Time</p> <ul style="list-style-type: none"> • 1-day workshop

Proposed Training and Competency Model

<ul style="list-style-type: none"> • Liaison with emergency services • TMC communication with the network • Setting road levels • Crash reports • Delegations of approvals • Setting local conditions • ROPE applications • Long-term TSLs • Co-ordination • Risk assessment • Traffic impact assessment including awareness of intersection capacities, signal operation basics, temporary control options • Network performance / journey management • Statutory obligations, including Transport Rules, HSWA, NZUAG Code etc. • Incident Response • Emergency / CDEM Response • EEDs • Overweight/over dimension routes • Developing strategies to raise CoPTTM compliance • Non-conformances • Cross network discussion • Respond to public and Police enquiries • Understand implications of non-compliant TMPs 			
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Proposed Training and Competency Model

<ul style="list-style-type: none"> • Understand related legislation • Managing audit process • Develop audit strategy • Develop strategies for network specific issues 			
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
<ul style="list-style-type: none"> • Peer review by another TMC (preferably neighbouring or equivalent RCA) of the following: <ul style="list-style-type: none"> ○ Local conditions (network specific issues) ○ Strategies to raise CoPTTM compliance ○ Audit strategy ○ TMC communication with the network ○ Crash reporting ○ Risk assessment ○ Traffic impact assessment including awareness of intersection capacities, signal operation basics, temporary control options ○ Network performance / journey management ○ Statutory obligations, including Transport Rules, HSWA, NZUAG Code etc. ○ Incident Response ○ Emergency / CDEM Response 	<ul style="list-style-type: none"> • Peer review by another TMC 	<ul style="list-style-type: none"> • The documents adequately address key issues with the network • Risk assessments have been completed for any issues below CoPTTM minimum standards and mitigation is appropriate for the risk 	

18. Profile – TTM Mentor

Block of learning:	TTM Mentor	Who it is for:	Person who mentors/trains staff on the practical aspects of their role, may be an in-house person.	
Prerequisite:	<ul style="list-style-type: none"> • Must have practical experience in the activities they will be training on • Must be certified/warranted in the mentoring they will be undertaking • 			
Competency objective	<ul style="list-style-type: none"> • Knowledge of NZTA requirements of mentors, the TTM Mentor responsibilities and the mentoring process • Able to provide mentoring on tasks requiring some form of CoPTTM knowledge or skill, to the required standards • Able to correctly complete the paper work associated with the mentoring • Able to apply adult learning principles to maximise the learning opportunities of the participants 			
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
<ul style="list-style-type: none"> • Health and safety processes relevant for the role • NZTA requirements of TTM Mentors • Principles of adult education • On-job training hints, tips and techniques • How to complete mentoring • How to use CoPTTM during the mentoring • Practice mentoring 	<ul style="list-style-type: none"> • Knowledge tests and scenarios during training • Practice mentoring with feedback 	<ul style="list-style-type: none"> • 90% pass mark • Must meet minimum mentor standards to pass 	<p>Briefing delivered by: NZTA approved Trainer</p> <p>Refresher</p> <ul style="list-style-type: none"> • Not required • Must complete STMS refresher for levels of TTM <p>Time</p> <ul style="list-style-type: none"> • 4 hours 	

Proposed Training and Competency Model

			Related Unit standard • Need to add
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
<ul style="list-style-type: none"> • As development, work with an existing TTM Mentor to complete 5 different mentoring activities 	<ul style="list-style-type: none"> • Existing TTM Mentor observation • Assessment of competence completed by TTM Verifier 	<ul style="list-style-type: none"> • Must meet TTM Mentor standards for at least 5 activities 	

19. Profile – TTM Verifier

Block of learning:	TTM Verifier	Who it is for:	Person who confirms competence of a person in a specific activity, may be an in-house person.	
Prerequisite:	Must be certified/warranted to the level they are assessing			
Competency objective	<ul style="list-style-type: none"> • Knowledge of the assessment principles, responsibility and process • Able to correctly determine if a candidate has completed work to the required standard and if not direct appropriate action • Up to STMS level 1 (includes TTM Worker, TC & STMS) a verifier determines whether the candidate is competent • At level 2/3, the verifier furnishes a statement of competence to a CoPTTM Assessor • Able to keep accurate/appropriate records of verifications 			
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.	
<ul style="list-style-type: none"> • Health and safety processes relevant for the role • Principles of verification/assessment • Responsibilities of the verifier • The verification process • Verification documentation (including verification standards) • How to brief a candidate about assessment process • • How to complete TTM verifications • Dealing with verification issues (eg dangerous activity, candidate too slow or not able to answer specific questions) 	<ul style="list-style-type: none"> • Knowledge tests during training • Practice assessment components during the training <ul style="list-style-type: none"> ○ Brief candidate about assessment process ○ Complete assessment ○ Provide feedback ○ Record keeping 	<ul style="list-style-type: none"> • 90% pass mark in knowledge tests • Must meet standards for each component – can rework multiple times 	<p>Briefing delivered by: NZTA approved Trainer</p> <p>Refresher</p> <ul style="list-style-type: none"> • Must complete STMS refresher for levels of TTM <p>Time</p> <ul style="list-style-type: none"> • 1 day <p>Related Unit standard</p> <ul style="list-style-type: none"> • US 4098 	

Proposed Training and Competency Model

<ul style="list-style-type: none"> • Providing feedback • Record keeping 			Moderation NZTA will undertake moderation of TTM Verifier
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
<ul style="list-style-type: none"> • As development, work with an existing TTM Verifier to complete 5 verifications 	<ul style="list-style-type: none"> • Assessment of competence completed by existing TTM Verifier 	<ul style="list-style-type: none"> • Must meet verification requirements for at least 5 verifications 	

20. Profile – CoPTTM Assessor

Block of learning:	CoPTTM Assessor	Who it is for:	CoPTTM Assessor is selected by NZTA to assess competence in a specific specialist activity (eg L2/3 practical assessment, TMP design assessment, Barriers assessment)
Prerequisite:	Must be TTM certified/warranted to the level they are assessing		
Competency objective	<ul style="list-style-type: none"> • Knowledge of the assessment principles, responsibility and process • Able to correctly determine if a candidate has completed work to the required standard and if not direct appropriate action • Able to keep accurate/appropriate records of assessments 		
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
<ul style="list-style-type: none"> • Health and safety processes relevant for the role • Principles of assessment • Responsibilities of the Assessor • The assessment process • Assessment documentation (including assessment standards) • How to brief a candidate about assessment process • • How to complete TTM assessments • Dealing with assessment issues (eg dangerous activity, candidate too slow or not able to answer specific questions) • Providing feedback • Record keeping 	<ul style="list-style-type: none"> • Knowledge tests during training • Practice assessment components during the training <ul style="list-style-type: none"> ○ Brief trainee candidate about assessment process ○ Complete assessment ○ Provide feedback ○ Record keeping 	<ul style="list-style-type: none"> • 90% pass mark in knowledge tests • Must meet standards for each component – can rework multiple times 	<p>Workshop delivered by:</p> <p>NZTA approved Trainer</p> <p>Refresher</p> <ul style="list-style-type: none"> • Every 3 years • Must complete STMS refresher for levels of TTM <p>Time</p> <ul style="list-style-type: none"> • 1 day <p>Related Unit standard</p> <ul style="list-style-type: none"> • US 4098 <p>Moderation</p>

Proposed Training and Competency Model

			<ul style="list-style-type: none"> NZTA will undertake moderation of CoPTTM Assessors
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
As development, work with an existing TTM Assessor to complete 5 assessments	<ul style="list-style-type: none"> Assessment of competence completed by existing Assessor 	<ul style="list-style-type: none"> Must meet assessment requirements for at least 5 assessments 	

21. Profile – CoPTTM Trainer

Block of learning:	CoPTTM Trainer	Who it is for:	Person who wants to become a trainer for selected CoPTTM workshops
Prerequisite:	<ul style="list-style-type: none"> • Must have credible industry experience in the areas they will be training on • Must be STMS certified/warranted to the level of road they will be training • Must be qualified in any of the workshops they will be running • Must hold (or be enrolled in training for) New Zealand Certificate in Adult and Tertiary Teaching (previously National Certificate in Adult Education and Training) or equivalent qualification 		
Competency objective	<ul style="list-style-type: none"> • Knowledge of NZTA requirements of trainers, the trainer responsibilities and the training process • Able to deliver the CoPTTM workshops they are authorised to deliver, to the required standards • Able to correctly complete the paper work associated with the workshop • Able to apply adult learning principles to maximise the learning opportunities of the participants 		
Knowledge of basic CoPTTM elements covered	Assessment method	Pass criteria	Misc.
<ul style="list-style-type: none"> • Health and safety processes relevant for the role • NZTA requirements of trainers • Principles of adult education • Training hints, tips and techniques • How to present the main workshop they will be presenting • How to use CoPTTM during the training • Differences between the various workshops • Practice presentation of key sections of the main workshop 	<ul style="list-style-type: none"> • Knowledge tests and scenarios during training • Practice presentations with feedback 	<ul style="list-style-type: none"> • 90% pass mark • Must meet minimum trainer standards to pass 	<p>Workshop delivered by: NZTA approved Trainer</p> <p>Refresher</p> <ul style="list-style-type: none"> • Every 3 years • Must complete STMS refresher for levels of TTM <p>Time</p> <ul style="list-style-type: none"> • 3 days

Proposed Training and Competency Model

			<p>Related Unit standard</p> <ul style="list-style-type: none"> • New Zealand Certificate in Adult and Tertiary Teaching (previously National Certificate in Adult Education and Training) <p>Moderation</p> <ul style="list-style-type: none"> • NZTA will undertake moderation of CoPTTM Trainers
On Job practical – skill elements to be covered	Assessment method	Pass Criteria	Misc.
<ul style="list-style-type: none"> • Awarded probationary trainer warrant if passes the Train the Trainer workshop (able to run TC workshops unsupervised – able to assist on STMS workshops) • Deliver parts of STMS workshop with moderator present 	<ul style="list-style-type: none"> • Moderator observation • Competence determined by CoPTTM Assessor/Moderator 	<ul style="list-style-type: none"> • Must meet CoPTTM trainer standards 	

Appendix 1: Background information

Rationale for project

The Training and Competency Working Party has been established by the NZTA to develop a new model for the CoPTTM training programme and associated practical competencies. This is a priority project identified by the CoPTTM Governance Group (CGG) and for the NZTA who were given a recommendation to introduce competence checks as a result of a Coroner Court inquiry.

This discussion document has been developed by the working party and issued by members of the CGG for consultation with their sectors of the industry. Feedback will be considered by the working party as it finalises the training and competency model to be submitted to the CGG for final comment before implementation.

Training and competency working party members

The following industry representatives have participated in the working party:

Person	Representing
George Boyd	GHD
Ray Edwards	Higgins
Stuart Fraser	NZTA
Peter Graham	Traffic Management and Control
Neil Greaves	NG Consultancy Limited
Chris Harmer	Higgins
Simon Harty	CTOC
Ben Isdale	Evolution Road Services
Tom Kiddle	Auckland Transport
Angela McNeil	Downer
James Scully	AMA (Fulton Hogan)

The following have assisted with running of the workshops:

Dave Wallace	Workshop facilitator
Tony Stella	Support person

Appendix 2: Terms of Reference (TOR) for Training and Competency

Introduction and purpose

The Training and Competency Working Party will be established by NZTA to develop a model for CoPTTM training programmes and associated competencies.

A paper provided by Civil Contractors is attached for consideration as part of these terms of reference.

A draft training and competency model will be developed by the working party with the assistance of an independent consultant. The consultant will be tasked to consult with representatives from the different sectors of the industry.

The final model will be presented to the CoPTTM Governance Group (CGG).

Requirements for the training and competency model

Requirements for training

The training must meet the needs and roles of the Contractors, Consultants and RCA Staff.

The training must meet the needs of all for the following environments:

- The level 1 and Low Volume,
- The level 2 low speed, and
- The level 2/3 high speed.

Requirements for competency

The training must also contain practical competency assessments at key qualification points these may include:

- Level 1 Traffic Controller
- Level 1 Site Traffic Management Supervisor
- Level 2/3 Site Traffic Management Supervisor.

Consideration may be given to requiring competency assessments for other roles such as TMP Designer, Auditor or truck mounted attenuator (shadow vehicle) driver, should these qualifications be established.

Potential Limitation

The existing courses provide a basis for current qualifications. The working group should be aware that any major repositioning of these would need to be worked through with existing qualification holders taken into consideration.

Working Party

Once the TOR are agreed a representative Working Party of key stakeholders will be appointed. Any proposals regarding the qualifications and competency model will be provided to the working party and the consultant. To assist with this process, members of CGG are invited to nominate potential working party members no later than 10 October 2016.

Attached is the initial NZTA proposal about the introduction of competencies and the proposal from Civil Contractors about the review of training and competencies.

Action plan

Set out below is an initial action plan. The working party will review this and amend it as required.

Action	Person responsible	Completion date
Literature search for TTM training and competencies	Opus Research	March 2017
Working party meeting to review material, develop draft model for training and competency and revise action plan	Working party with consultant	Meeting 1 29 March 2017 Meeting 2 9 May 2017
Complete consultation on the draft training and competency model	Consultant	July 2017
Report results of consultation to working party	Consultant / Working party	August 2017
Amend the model and represent to the working party as necessary	Consultant	August 2017
Present model to CGG	Working party	September 2017
Prepare new training material and competency assessments	NZTA/Consultant	Ongoing
Brief the trainers on the new training material and competence assessments	NZTA	Ongoing
Brief industry about revised training and competency assessment	NZTA/Working party	Ongoing
Utilise the revised training material and competency assessment	Industry	Ongoing

Appendix 3: About competencies

Introduction and explanation of competencies

The working party has been working on the following definition of competencies:

A competency is a cluster of:

- Abilities
- Knowledge
- Skills
- Commitments.

1. Behavioural competencies (life skills) are a set of human skills acquired via teaching or direct experience that are used to handle problems and questions commonly encountered in daily human life.

Examples are:

- Communication
- Assertive
- Problem solving
- Initiative

3. Practical competencies relate to functions, processes, and roles within the organisation. They include the knowledge of, and skill in the exercise of, practices required for successful accomplishment of a specific job or task.

Examples are:

- Complete worksite administration
- Operate a shadow vehicle with TMA
- Install and manage Stop/Go
- Complete a TTM audit
- Identify and mitigate risks

There are different types of competencies:

1. Behavioural
2. Professional
3. Practical

2. Professional competencies are competencies that allow for success in an organisational context. They are the accelerators of performance or – if lacking in sufficient strength and quality – are the reason people fail to excel in jobs.

Examples are:

- People management
- Leadership skills
- Conflict resolution
- Customer service

The CoPTTM training and competencies model focusses on the **practical competencies**.

If the industry pursues a National Certificate in Temporary Traffic Management then the practical, behavioural and professional competencies will be addressed through completion of the elements within that certificate

About the training and competency model

The training and competency model consists of 3 components which are outlined as follows:

Component	Key points
Role/Group needing CoPTTM knowledge	<ul style="list-style-type: none"> • This is a list of key roles or groups requiring some form of CoPTTM knowledge • It includes a broad description of what they do • Roles are linked to blocks of learning • For example, this could include warranted positions, titles, industry names
Map of CoPTTM learning blocks	<ul style="list-style-type: none"> • Map showing the CoPTTM learning blocks with a preferred order of learning and any pre-requisites • Learning blocks need to be relevant to the qualification required or roles being undertaken • A block of learning could include a workshop, on-job training and assessment. This is detailed in the profile for each block • The map of leaning blocks can be used as part of career planning
Profile for each learning block	<ul style="list-style-type: none"> • For each learning block we identify the following: <ul style="list-style-type: none"> ○ Who it is for ○ Prerequisites ○ Competency objective ○ Knowledge of basic CoPTTM elements covered (including assessment method and pass criteria) ○ On Job practical – skill elements to be covered (including assessment method and pass criteria) ○ Is a refresher required? ○ Approximate timing for learning ○ Related unit standards

Start point of the model

The start point for the training and competency model is a new person entering the industry without any roading experience or qualifications.