



**Australian Government**

# **ICPPRN3870 Use colour management for production**

**Release: 1**

# ICPPRN3870 Use colour management for production

## Modification History

| Release   | Comments                                                                                     |
|-----------|----------------------------------------------------------------------------------------------|
| Release 1 | This version first released with ICP Printing and Graphic Arts Training Package Version 4.0. |

## Application

This unit describes the skills and knowledge required to obtain an acceptable match across colour devices, including the correct use of colour profiles and calibration of monitors and output devices.

It applies to skilled individuals in the printing and graphic arts industry who set up, operate and monitor equipment and machinery, and who may have to prepare material and apply solutions to problems. They may also provide leadership and guidance to others, with limited responsibility for the output of others.

No licensing, legislative or certification requirements apply to this unit at the time of publication.

## Pre-requisite Unit

ICPPRN284 Use colour management systems

## Unit Sector

Printing

## Elements and Performance Criteria

| ELEMENT                                          | PERFORMANCE CRITERIA                                                                                                                                         |
|--------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Elements describe the essential outcomes.</i> | <i>Performance criteria describe the performance needed to demonstrate achievement of the element.</i>                                                       |
| 1. Identify colour requirements                  | 1.1 Determine publication conditions and identify colour management requirements<br>1.2 Establish requirements to guide provision and use of colour profiles |
| 2. Calibrate digital                             | 2.1 Calibrate digital devices in the workflow according to colour                                                                                            |

| ELEMENT                               | PERFORMANCE CRITERIA                                                                                                                                                                                                                                                                                                                     |
|---------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| devices                               | reproduction requirements<br>2.2 Create, use and store device profiles created during calibration according to work health and safety (WHS) requirements<br>2.3 Check digital devices and confirm they meet calibration requirements<br>2.4 Adjust profiles and equipment parameters to bring devices back into calibration, as required |
| 3. Use colour profiles                | 3.1 Identify source and destination profiles within the workflow<br>3.2 Use profiles to confirm colour match on monitors, proofs and final product requirements<br>3.3 Convert images to correct profile if incorrect profile is embedded<br>3.4 Use rendering intent and confirm accurate colour conversion                             |
| 4. Configure software within workflow | 4.1 Determine software applications, within workflow, with colour management features<br>4.2 Configure software applications with colour management features to meet output conditions<br>4.3 Configure, save and use range of colour management presets according to output requirements                                                |

## Foundation Skills

*This section describes language, literacy, numeracy and employment skills incorporated in the performance criteria that are required for competent performance.*

| Skill                   | Description                                                                                                                                                                                                                                                                      |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Reading                 | <ul style="list-style-type: none"> <li>Identifies and interprets text to establish job requirements from information contained within relevant procedures and specifications</li> </ul>                                                                                          |
| Writing                 | <ul style="list-style-type: none"> <li>Enters routine data associated with production processes and enterprise procedures</li> </ul>                                                                                                                                             |
| Self-management         | <ul style="list-style-type: none"> <li>Identifies and follows explicit and implicit protocols and meets expectations associated with own role</li> <li>Complies with work health and safety (WHS) requirements and follows enterprise procedures relevant to own role</li> </ul> |
| Planning and organising | <ul style="list-style-type: none"> <li>Takes responsibility for planning and organising own workload, and assembles required resources</li> </ul>                                                                                                                                |

|                 |                                                                                                                                                                                                |
|-----------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Problem Solving | <ul style="list-style-type: none"><li>• Recognises and takes responsibility for addressing predictable, and some less predictable, problems in familiar work contexts</li></ul>                |
| Technology      | <ul style="list-style-type: none"><li>• Utilises a broad range of features within applications to improve personal productivity, optimising software functions for specific purposes</li></ul> |

## Unit Mapping Information

Supersedes and is equivalent to ICPPRN387 Use colour management for production.

## Links

Companion Volume Implementation Guide is found on VETNet -

<https://vetnet.gov.au/Pages/TrainingDocs.aspx?q=a74b7a0f-a253-47e3-8be0-5d426e24131d>

# Assessment Requirements for ICPPRN3870 Use colour management for production

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## Performance Evidence

The candidate must demonstrate the ability to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including evidence of the ability to:

- produce three jobs with final product on varied media, including both print and digital platforms.

In the course of the above the candidate must:

- apply colour management system maintenance procedures according to enterprise procedures and job specifications.

## Knowledge Evidence

The candidate must be able to demonstrate knowledge to complete the tasks outlined in the elements, performance criteria and foundation skills of this unit, including knowledge of:

- work health and safety (WHS) risks and requirements for managing colour for digital production
- densitometric and spectrophotometric measurement
- International Colour Consortium (ICC) profiles, their use and the effects they can have on output
- device independent colour and profile connection spaces
- use of colour space conversions and rendering intents
- factors that influence selection of highlight and shadow aim points
- grey balance requirements in relation to colour correction and the process of determining them
- ink/toner light errors and the distinctions between 'ideal' and 'actual' inks/toners
- viewing light conditions and metamerism
- factors determining requirements for colour correction and the effect different stocks have on colour
- the effects different inks have on colour reproduction for proofing and final production, and the effect of dot gain on colour
- the type of press and printing process used for final output

- solutions to common problems of colour management
- the effects of using the wrong profile on output
- manufacturer manuals, enterprise procedures and work health and safety documentation, including their location and purpose.

## Assessment Conditions

Gather evidence to demonstrate consistent performance in conditions that are safe and replicate the workplace. Noise levels, production flow, interruptions and time variances must be typical of those experienced in the printing field of work and include access to:

- special purpose tools, equipment and materials
- colour management systems.

Assessors of this unit must satisfy the requirements for assessors in applicable vocational education and training legislation, frameworks and/or standards.

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