

# **UK Pavement Management System**



## **Annual Health Check 2018**

### ***Requirements***

**Version Number 1.00 – Issue**

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## Document Information

<b>Title (Sub Title)</b>	Annual Health Check 2018 Requirements
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<b>Description</b>	This document gives the requirements for the 2018 UKPMS Annual Health Check

## Document History

<b>Version No</b>	<b>Status</b>	<b>Author</b>	<b>Date</b>	<b>Changes from Previous Version</b>
0.01	Draft	RAC	04.04.18	<p>First draft based on 2017 AHC Requirements but revised to reflect changes agreed with external stakeholders and with the chair of RCMG following the 2017 AHC:</p> <ul style="list-style-type: none"> <li>• For consistency, any references to SCANNER/TTS have been changed to SCANNER.</li> <li>• A new point has been added to section 7 (Evidence) to clarify that Developers are expected to provide evidence to show that any Improvement Plan items have been resolved.</li> <li>• The requirement to carry out the post-AHC exercise promptly has been emphasised.</li> <li>• References to RP10.01 have been expanded to include the introduction of an optional new rule set to support changes to visual surveys.</li> <li>• References to visual surveys have been expanded to include optional tests of the new AEI and revised CVI surveys.</li> <li>• Objective 1.2 (finding errors during HMDIF load of condition data) has been refreshed.</li> </ul>
0.02	Draft	RAC	10.04.18	Objectives section reformatted
0.03	Draft	RAC	14.05.18	Updated following RCMG meeting to clarify that the new CVI and AEI surveys together with the associated rule set are subject to availability.
0.04	Draft	APP	16.05.18	Quality reviewed
0.05	Draft	RAC	25.05.18	Revised following quality review by APP
1.00	Issue	RAC	05.06.18	Ratified by Amanda Richards for RCMG

## Document Owner

The owner of this document is the Road Condition Management Group (RCMG).

## Document Support

Support for this document is provided by Linhay Consultancy Ltd and Hyperion Infrastructure Consultancy Ltd who can be contacted via [ukpms@hyperion-uk.com](mailto:ukpms@hyperion-uk.com).



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These organisations have been appointed as the UKPMS system accreditors by the UK Roads Board.

This document can be found online on the [RCMG website](#).



## Introduction

The purpose of the UKPMS Health Check is to provide assurance that UKPMS systems continue to meet UKPMS requirements. This includes national reporting and the use of the current Rules & Parameters. The Health Check is only carried out on fully accredited UKPMS systems and supplements rather than replaces the UKPMS Comparability Tests; it is only undertaken by systems which have already passed the Comparability Tests.

The Annual Health Check (AHC) is intended to be a pragmatic and less onerous alternative to repeating the Comparability Tests when an existing UKPMS system is modified.

This document provides information about the format and content of the 2018 UKPMS AHC. It is arranged in four parts:

- **Changes since the last version**
- **Principles:** a statement of the test arrangements and administration.
- **Objectives:** a list of the tests that will be included in the 2018 AHC and an outline of what Developers will be expected to provide.
- **Appendix:** a cross reference between the 2018 UKPMS AHC and the Comparability Tests.

## Changes since last version

This document is based on the 2017 AHC Requirements but revised to reflect changes agreed with external stakeholders and ratified by the chair of RCMG:

- For consistency, any references to SCANNER/TTS have been changed to SCANNER.
- A new point has been added to section 7 (Evidence) to clarify that Developers are expected to provide evidence to show that any Improvement Plan items have been resolved.
- The requirement to carry out the post-AHC exercise promptly has been emphasised.
- References to RP10.01 have been expanded to include the introduction, when available, of an optional new rule set to support changes to visual surveys.
- References to visual surveys have been expanded to include optional tests of the new AEI and revised CVI surveys when available.
- Objective 1.2 (finding errors during HMDIF load of condition data) has been refreshed.

## Principles

This section covers the test arrangements and administration. It is divided up into

- Timing and consultation
- Test arrangements

### ***Timing and Consultation***

1. The approval mechanism for the 2018 AHC is via the Road Condition Management Group (RCMG) who is asked to agree the requirements for the



AHC following consultation with external bodies, national governments and the UKPMS Developers.

2. Once the requirements have been agreed they are issued to the UKPMS Developers and any other stakeholders identified by the RCMG, as well as being published on the [RCMG](#) website.
3. The AHC is intended to reflect current needs for UKPMS rather than the original Comparability tests and so the AHC will evolve in the future, to reflect future needs. To facilitate this, the AHC operates on an annual cycle. This annual cycle allows new requirements to be added annually, and also allows for revisions of the Rules & Parameters.
4. The AHC will normally be updated annually, but revisions to the AHC may also be introduced at a second point within the annual timetable, referred to as the secondary window. Revisions made during the secondary window take the form of optional alternative tests and will normally be fully integrated into the next main AHC. The timetable for the main AHC and this secondary window is given in the following table:

<b>Dates</b>	<b>Main AHC</b>	<b>Secondary Window</b>
May to July	Prepare AHC materials	Gather revisions for secondary AHC window
August to October	AHC carried out by Developers	
November to January	UKPMS system versions released to users.	Revise AHC materials
February to April	Gather requirements for next AHC	Secondary AHC window

5. For both the main AHC and the secondary window, accreditation remains valid for 13 months following the end of the main AHC test window (regardless of whether the accreditation has been carried out within the main AHC or within the secondary window). The main AHC window is August to October and so accreditation remains valid until the end of November.
6. Every Developer with a fully accredited UKPMS system must submit a completed test each year either for the main AHC or within the secondary window. Note that even if a Developer has not changed their software they must submit a completed test as part of the AHC, corresponding to the latest version of the AHC.
7. Versions will only be accepted for full accreditation within the two AHC windows. However, if necessary, checking and the submission of additional information (on request) may continue beyond the end of the window.
8. If any items are identified as part of an Improvement Plan, then these items must normally be resolved by the next full AHC. In exceptional circumstances



the chair of RCMG may approve a request to defer an Improvement Plan item to an agreed date.

9. Once full accreditation has been obtained, if a Developer releases any new versions commercially during the year they must follow the Interim Accreditation Process. This is the process for accrediting new system versions outside the standard AHC period and is described in the UKPMS Interim Accreditation document. The Developer must decide whether the changes have any impact on UKPMS modules or UKPMS results and fill in the Interim Accreditation Checklist as appropriate. A completed Checklist should be submitted for each interim version requiring accreditation, along with any necessary supporting documents.
10. Interim accreditations for the current AHC will be accepted at any time up to the release of the next AHC package and are not constrained by the time windows.
11. For the 2018 AHC the following timetable will apply:
  - The AHC will be revised during the period February - July, and published by the end of July 2018. During the review process the RCMG will be asked to agree the new requirements and any changes to these will then be reflected in the test package itself.
  - Developers should submit the AHC by the end of October 2018 for any version they wish to be accredited during the main AHC window. A secondary window for accreditation will be offered February–April 2019. Developers will be given the opportunity to book a time slot for submission of their test results if they wish.
  - The mandatory post-AHC exercise will take place in a single phase immediately after the main AHC window. Developers can choose between the main AHC window and the secondary window for their accreditation but, regardless of their choice, all Developers must submit data for the post-AHC exercise during the main AHC window. All Developers will be required to participate in the post-AHC exercise directly after the main AHC window and will be expected to submit results and any follow-up work promptly during this exercise.
  - The only accredited versions are those that have successfully completed the current AHC; versions accredited under the 2017 AHC do not carry the accreditation forward beyond the end of November 2018.
  - Once full accreditation via the 2018 AHC has been obtained for a version then further versions may be submitted for accreditation under the Interim Accreditation Process any time up to the release of the 2019 AHC package.
  - Accreditations obtained for the 2018 AHC will remain valid until the end of November 2019.



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## **Test arrangements**

1. The AHC is used for:
  - Maintaining full accreditation for systems that have been accredited through UKPMS Comparability testing; and
  - Partial accreditation of part-systems when these are linked to an existing UKPMS system which already has full accreditation. Partial accreditation is only available to existing Developers (i.e. those with an existing UKPMS system with full accreditation)
2. The AHC will only include detailed comparability tests to check that the UKPMS algorithms and processes are operating correctly and will not include functional requirements, other than where these are necessary to establish the algorithm results or where important functionality has been added to UKPMS.
3. The 2018 AHC consists mainly of tests for which the expected results are provided to the Developer as part of the 2018 AHC test package. For these tests the Developer is required to submit evidence to demonstrate that their system produces the expected results and this evidence will be audited by the UKPMS system accreditors. The 2018 AHC will also contain some tests without providing any expected results and the results submitted by the Developer for these tests will be checked by the UKPMS system accreditors.
4. The test package will provide full details about how the tests are to be conducted. It will include:
  - **Instructions**
  - **Checklist**
  - **Test data:** The core test data are designed around the smallest number of sections and processing runs necessary to test all the objectives. The test data are 'artificial'; they are designed specifically for the tests and are not drawn from real data. However, there will also be a mandatory post-AHC exercise involving real-world data which Developers will be required to source and provide in HMDIF format.
  - **Results:** The onus is on Developers to track down any differences between their software and the expected results and so the test package includes some additional 'audit' information for the automatic pass and weighting set runs. However, Developers are not required to submit an audit trail themselves.

To facilitate the checking of results by the UKPMS system accreditors the AHC is prescriptive about the defect length output, as this provides the main check of automatic pass results.

5. The specific aspects of UKPMS to be tested are given below in the objectives, and these are targeted at the most important parts of UKPMS. The objectives do not necessarily provide a complete list of the requirements for a UKPMS system; the complete requirements were originally established by the Comparability Tests and updated by the UKPMS AHC Review (2013) and UKPMS Workshop (2014). The Appendix below provides a cross check between the original Comparability Test requirements and the 2018 AHC objectives.



6. Each year tests are added to the AHC to cover new or changed requirements and other tests are dropped. If a test is dropped this does not necessarily indicate that that requirement has been dropped from UKPMS, it may merely indicate that the requirement is not being tested in the current year. This is in order to keep the volume of tests as low as possible and avoid the AHC growing ever larger each year. However, there are also some tests which have been permanently dropped from the UKPMS requirements and will not be tested in future (see Section 8 of Objectives – Detailed Comparability).
7. The AHC uses specified versions of the rules and parameters and weighting sets. The rules and parameters used for the 2018 Health Check will be either RP10.01 or, optionally (when available), a new set of rules & parameters which will support changes to visual surveys. The weighting sets used will be those currently specified for national reporting.
8. In the event of any dispute between the Developer and the UKPMS system accreditor the matter will be referred to the RCMG for a decision. An appeal process has been developed by the UKPMS system accreditors in consultation with RCMG and is available [here](#).

## **Objectives – Detailed Comparability**

The objectives for the AHC are presented in a hierarchical fashion, with a top-level objective followed by more detailed objectives that address additional requirements related to the top-level objective. Although the objectives do not imply any particular sequence for the tests, the test package produced from these may require certain tests to be carried out in a specified order.

### **1. Loading data**

- 1.1. Data specifying sections, nodes and inventory are provided in the test package. These data must be loaded into the system via HMDIF files using functionality which is available to the users of the system. The Developer will be expected to confirm that the UKPMS system has been populated with these data.
  - 1.1.1. Some inventory data will be loaded more than once to check that this is handled appropriately (either when loaded or when processed).
- 1.2. Find errors during HMDIF load of condition data. Some loads will fail with an error message. Some errors that may be included in this test are:
  - 1.2.1. Invalid survey type.
  - 1.2.2. Invalid defect code for survey type.
  - 1.2.3. Value parameter provided when option parameter is expected.
  - 1.2.4. Invalid observation value/percent indicator.
- 1.3. Load CVI data (and, optionally, the new CVI data when available) in an HMDIF file. Issues which may be included in this test are:





- 1.3.1. Load some data that have to be shrunk and some that have to be stretched to match the section length.
- 1.3.2. Load a section requiring reversal.
- 1.4. Load DVI data in an HMDIF file. Issues that may be included in this test are:
  - 1.4.1. Load some data that are stretched, and some that are shrunk – in both cases, within the last subsection.
  - 1.4.2. Load some data which are stretched and some which are shrunk – but beyond the final subsection.
  - 1.4.3. Load a concrete DVI survey with a variable bay length.
  - 1.4.4. Load a section requiring reversal.
- 1.5. Load SCANNER data in an HMDIF file. Issues that may be included in this test are:
  - 1.5.1. The measured length must lie within 1m of the section length.
  - 1.5.2. Load some subsections of a non-standard length.
  - 1.5.3. Load some non-integer start and end chainages, including point item data (e.g. crack map and co-ordinate data) where, after rounding, the chainage of the data is equal to the measured length of the section.
  - 1.5.4. Load a section requiring reversal.
  - 1.5.5. Load files for which the MACHINE attribute is populated.
- 1.6. Load FNS data in an HMDIF file. Issues that may be included in this test are:
  - 1.6.1. Load some data that have to be shrunk and some that have to be stretched to match the section length.
  - 1.6.2. Load a section requiring reversal.
- 1.7. Load AEI data in an HMDIF file. This is an optional test for the 2018 AHC and is subject to availability.

## **2. Setting up costs**

- 2.1. Treatment costs.

Costs are only set up for those treatments actually used during processing, and the costs set up are markedly different for each treatment. This helps Developers and the UKPMS system accreditors to check that the results of the automatic pass are correct (because if the wrong treatment is selected the cost is likely to differ by a clearly noticeable amount). The costs used are not realistic and they should not be distributed in a 'live' system.



### **3. Use of correct rule set**

The AHC includes tests that help to indicate whether the correct rule set has been loaded. However, this is not an exhaustive check, and so if the rule set has been loaded using a manual process, any resulting errors may not be trapped.

- 3.1. Check that the Rule Set identifier is RP10.01 or later.
- 3.2. Checks targeted at any changes introduced in RP10.01 (or a later rule set if this is being used).

### **4. Network and data composition**

The data used for the tests are based on a subset of features, construction types and pavement types. The reason for this is solely to reduce the volume of the tests, and so this does not imply any reduction in UKPMS requirements in this respect.

- 4.1. The network includes CW, KB, FW, CT, VG and CI features, but with joint features (LJ and TJ) for concrete carriageways.
- 4.2. The network has inventory of the following construction types:

CW

- BT – bituminous
- BL – block paved
- XC – covered concrete
- CRC – continuously reinforced concrete
- RJC – reinforced jointed concrete
- CO – concrete

KB

- KB – kerb

FW, CT, VG

- BL – block paved
- BT – bituminous
- FL – flagged
- CO – concrete

- 4.3. The network has condition data for the following pavement types:

CW

- BTCC – bituminous surface, unknown construction
- BP – block paved
- COCO – covered concrete
- CU – concrete surface unknown construction
- UK – unknown

FW, CT, VG

- BP – block paved



BT – bituminous  
FG – flagged  
CR – concrete  
UK – unknown

4.4. The network includes data for the following XSP codes:

Minimal: L, R, C

Full: L1, LE, -L1, CL1, CL2, +L1, +R1 CR2, CR1, -R1 RE, R1, R2, CC

4.5. The data include a range of defects, so that different ratings and CI calculations are called up. This provides a suitable spot check that the rule set has been loaded correctly, but this check is not exhaustive.

4.6. Defects and inventory are chosen so that:

4.6.1. Defect refinement is required depending on inventory construction:

Carriageways: BTCC to be mapped to BT or COCO.

CU to be mapped to CCR or RCR.

Footways: UK to be mapped to BT, CR, FG or BP.

4.6.2. Defect chainages are adjusted to match compatible inventory.

4.6.3. Defects are dropped which have inventory, but none of a construction type compatible with the pavement type.

4.6.4. The default inventory is used where there is no inventory present.

4.7. Defects are chosen so that defect combinations are generated.

4.8. The network and survey data are designed to test the calculations used for national reporting.

4.8.1. The network includes principal, non-principal classified and unclassified sections.

4.8.2. The network includes footways with a range of hierarchies.

4.8.3. The network includes at least one section which has not been surveyed.

4.8.4. The network includes at least one section which only has survey data outside the date range for national reporting.

4.8.5. Some 'not assessed' data are included.

4.8.6. Sections with different road types are included.

4.8.7. The network includes some data which fall precisely on the red threshold and some data which fall precisely on the amber threshold.

4.8.8. The network includes some data which fall precisely on the date thresholds.

## **5. Automatic Pass processing**

5.1. Non-projection: Check that the defect lengths, together with their condition indices, treatments, costs and rankings are correct. Two types of automatic pass run are required:



- 5.1.1. Merge Method One with 100m fixed intervals.
- 5.1.2. Merge Method Three (standard variable merge) with the default parameters.

Any or all of these runs will include the following:

- 5.1.3. Processing of CVI, DVI, SCANNER and FNS data, and optional processing of the new CVI data and AEI data when available.
- 5.1.4. Processing to enable financial information to support asset management to be provided.
- 5.1.5. A check that the distinction between Full & Minimal XSPs has been dropped and that CVI data collected at the minimal XSP level can be processed regardless of whether there is inventory present.
- 5.1.6. Use of the CVI/DVI switch. Only one setting of this switch will be tested; the setting used will be that most likely to be used for automatic pass runs used to produce national results.
- 5.1.7. The ability to select specific survey types, surveys and sections
- 5.1.8. Use of dates to select specific survey data
- 5.1.9. Correct selection of data based on the most recent available for a section/feature/XSP. Note that if the only data for a section/feature/XSP within a particular survey are 'Not Assessed' then the next most recent data should be used.
- 5.1.10. Defect refinement (See 4.6)
- 5.1.11. Defect combinations (See 4.7)

Note that the reports from these runs will include some of the 2018/19 national reports. (See Objective 7.4). Some systems may be able to generate these reports from a single Automatic Pass run; others may need to carry out an Automatic Pass run corresponding to each of the national reports. Either of these approaches is acceptable.

Reports will also be required to provide financial information to support asset management (see Objective 7.5).

## **6. Weighting Set processing**

Weighting Set processing will be included in the 2018 AHC with the following requirements:

- 6.1. Weighting Set processing using the algorithm and data model described in Technical Note 49, including data selection and the choice of weighting set. Note that this will include the requirement for the user to be able to choose between the Original, Revised or other Weighting Sets for any Weighting Set run.
- 6.2. The ability to import weighting sets (or equivalently, to link to weighting sets) published on the [RCMG](#) website without requiring Developer involvement.



Note that the reports from the Weighting Set processing will include 2018/19 national reports (see Objective 7.4) and will also include the weighting set main report (Objective 7.3.3), a detailed results report (Objective 7.3.4) and a coverage report (Objective 7.3.5). Reports will also be required to provide financial information to support asset management (see Objective 7.5).

## **7. Evidence**

Evidence will be required to support the Developer's assessment that their system meets the AHC requirements. This evidence will be based on the following list:

- 7.1. Reports or other feedback as specified in the test instructions to confirm:
  - 7.1.1. That the system has been set up with the required network, inventory and condition data.
  - 7.1.2. That the system has rejected those HMDIFs with errors, giving sufficient details to locate and correct the errors.
- 7.2. Reports on the Automatic Pass
  - 7.2.1. A defect length report to a specified format will be required for each of the automatic pass runs specified in the test. The format for this report will be an Excel spreadsheet with agreed columns.
- 7.3. Reports or other feedback as specified in the test instructions for the Weighting Set processing to confirm:
  - 7.3.1. That weighting sets can be imported (or linked to) once published on the [RCMG](#) website without requiring Developer involvement.
  - 7.3.2. The interface for a Weighting Set processing run, including the choice of weighting set and data selection parameters.
  - 7.3.3. The weighting set main report.
  - 7.3.4. The detailed results report giving subsection values plus either family or individual defect scores, for a user-specified part of the network.
  - 7.3.5. The coverage report (as specified in Technical Note 49).
- 7.4. National and local reports

The production of the national reports for 2018/19 is presented as four modules in the 2018 AHC relating to England, Northern Ireland, Scotland and Wales. Developers are free to choose which of these modules they wish to supply and their AHC status will be reported accordingly. Note in order to obtain accreditation for a module then all reports within that module must be supplied; it is not possible to be accredited for part of a module. There is a separate module for local reporting and this is mandatory.

In all cases the test will include the ability to extract and process appropriately the relevant part of the supplied network.



- 7.4.1. England national reporting
  - 7.4.1.1. 130-01 for the principal roads.
  - 7.4.1.2. 130-02 for the non-principal classified roads.
- 7.4.2. Northern Ireland national reporting
  - 7.4.2.1. PI report based on visual data (for unclassified roads only).
  - 7.4.2.2. PI report based on SCANNER data (for A, B, C and unclassified roads).
- 7.4.3. Scotland national reporting
  - 7.4.3.1. PI report encompassing all parts of the carriageway network.
- 7.4.4. Wales national reporting
  - 7.4.4.1. THS/011a for the principal roads.
  - 7.4.4.2. THS/011b for the non-principal classified B roads.
  - 7.4.4.3. THS/011c for the non-principal classified C roads.
  - 7.4.4.4. THS/012 for the combined results.
- 7.4.5. Local reporting
  - 7.4.5.1. Local indicator BV224b for the unclassified roads.
  - 7.4.5.2. Local indicator BV187 for footways of hierarchy 1a, 1 & 2.

7.5. Financial information to support asset management.

Some of these reports may require the user to enter supplementary information interactively to be used in the calculation of some of the figures given on the reports.

As appropriate the test will include the ability to extract and process appropriately the relevant part of the supplied network, and may also include explanations as to how various issues are handled (e.g. prior year comparatives, multiple processing runs and checks for the use of appropriate rule sets and weighting sets)

- 7.5.1. A report based on inventory data giving carriageway length, area and calculated average width for each road class and split by urban/rural.
- 7.5.2. A report based on inventory data giving footway length, area and calculated average width for each footway hierarchy and split by urban/rural.
- 7.5.3. A report based on inventory data for cycletracks and paved verges giving length, area and calculated average width split by urban/rural and construction type.
- 7.5.4. A report giving accumulated depreciation for carriageways.
- 7.5.5. A report giving annual depreciation for carriageways.
- 7.5.6. A report providing information for accumulated and annual depreciation of footways, cycletracks and paved verges.



## 7.6. Footway Network Survey

- 7.6.1. A report giving the survey coverage based on FNS condition data.
- 7.6.2. A report giving the headline indicator based on FNS condition data.

## 7.7. Transferring data via HMDIF files

- 7.7.1. The production of HMDIF files for a small real-life network to demonstrate that each of the following types of data can be exported:
  - 7.7.1.1. Network data
  - 7.7.1.2. Inventory data
  - 7.7.1.3. Survey data (CVI, DVI, SCANNER and FNS). Note that the new survey data for CVI and AEI will not be included in this test for the 2018 AHC.
- 7.7.2. All Developers will be required to submit real-world HMDIF files during the main window of the 2018 AHC. These files will then be circulated to other Developers to check that the data can be loaded and processed consistently. This is a mandatory post-AHC exercise and will form part of the requirements gathering for the 2019 AHC.

## 7.8. Improvement Plan items

Any Developer with Improvement Plan items will be required to provide evidence to demonstrate that the Improvement Plan items have been resolved.

## **8. *Functionality which has been dropped from UKPMS***

The following functionality has been dropped from the UKPMS requirements and will not be tested in future AHCs.

These requirements were dropped following the UKPMS AHC Review (2013):

- 8.1. Budgeting
- 8.2. Works Records
- 8.3. Ground Penetrating Radar
- 8.4. Tranche 3 functionality

These requirements were dropped following the UKPMS Workshop (23-Jan-14):

- 8.5. CRUT, DRUT, HRM data
- 8.6. Pavement samples
- 8.7. Data reports for network, inventory and condition
- 8.8. Defect Lengths sorted by Condition Index
- 8.9. Display of SCANNER data against a map background (in conjunction with third party tools as required).
- 8.10. Weighting Set values (on screen view and printed report)



## **9. Not included in the 2018 AHC**

The list below gives tests that are not included in the 2018 AHC. But, this does not imply that these aspects can be dropped by Developers; they are part of the UKPMS requirements, and so should be included in any fully accredited UKPMS system. However, because they do not have a direct impact on the results submitted for comparisons on a national basis, they are not included in the AHC for 2018. They may be required for future Health Checks, particularly as national requirements change.

### 9.1. Loading the following types of data is not included in the 2018 AHC

- 9.1.1. SCRIM
- 9.1.2. GripTester
- 9.1.3. Deflectograph

### 9.2. Setting up costs

Costs are only required for the treatments used during processing, and the mechanism used to set up and change costs is not tested.

Routine maintenance costs are not tested.

### 9.3. Use of correct rule set

There are some 'spot checks' to indicate if RP10.01 (or later) has been loaded and used, but these are not exhaustive. For instance, if the rule set has been loaded using a manual technique (rather than by loading whole tables) with the possibility of isolated errors, then these are unlikely to be discovered during the tests, and so Developers should have their own tests and checks in place to ensure that the rules have been loaded correctly.

### 9.4. Network and data composition

The 2018 AHC does not include:

- 9.4.1. The full range of pavement and construction types
- 9.4.2. The full range of XSPs
- 9.4.3. The full range of defects

### 9.5. Automatic Pass processing

The 2018 AHC does not include:

- 9.5.1. The full range of settings for the CVI/DVI switch
- 9.5.2. The full range of merge methods

### 9.6. Reports

The following reports are not required for the 2018 AHC:

- 9.6.1. Inconsistency report





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- 9.6.2. Automatic Pass audit trail (but note that audit information will be available for Developers to use to track down any differences between the official test results and their own results.)



## Appendix

This appendix provides a cross reference between the UKPMS 2018 AHC and the original Comparability Tests. It lists the title of each Comparability Test script, and indicates if it is included in the 2018 AHC or not. It is intended to indicate the scope and emphasis of the AHC, and provide a framework for the debate about what the AHC should and should not include. Note that new data and test runs have been designed for the AHC; the Comparability Test scripts will not be re-used for the AHC.

Comparability Test Script		Included in 2018 AHC?
1	Bulk Loading of Network Sections and Related Nodes	No <sup>1</sup>
2	Interactive Maintenance of Sections and Section-Related Data	No <sup>2</sup>
3	Establish an Inventory	No <sup>3</sup>
4	Maintain Inventory Data	No <sup>4</sup>
5	Establish Visual Condition Data 57 Load CVI HMDIF 58 Load DVI HMDIF 59 Check Non-Overwriting of Measured Length (DVI) 60 Check Stretching of Section Length and Associated Observations to Fit (DVI) 61 Check Overwriting of Estimated Section Length (DVI) 65 Check Stretching of Section Length and Associated Observations to Fit (CVI) 67 Load Single Section DVI HMDIF with Data Collected in Reverse Direction 71 Load / Merge Partial Survey by Cross Sectional Position (DVI) 72 Attempted load of Erroneous DVI HMDIF 73 Manual Correction of Errors in DVI HMDIF 74 Load of Error-Corrected DVI HMDIF 78 Print DVI Inconsistency Report 80 Listing of DVI Defects for Selected Sections 102 Listing of CVI Defects for Selected Sections	Part <sup>5</sup> Yes Yes Yes Yes No Yes Yes No No No No No No No
6	Establish Machine Condition Data Associated with a Network	No <sup>6</sup>
7	Maintain Visual and Machine Condition Data	No
8	Split and Merge Sections	No
9	Automatic Pass Processing (without Condition Projection) 146 Select / Nominate from Multiple Rule Sets (First Pass) 147 Select Sections for inclusion in Automatic Pass Run (First Pass) 148 Specify Run Time Parameters for Automatic Pass Run (First Pass) 159 Identify and Carry Out an Automatic Pass (First Pass) 183 Report on Defect Lengths (First Pass) 184 Automatic Pass Audit Trail (First Pass) 187 Delete an Automatic Pass 189 Process all Sections (Fixed Length Merging) 190 Process All Sections (Variable Length Merging)	Part No Yes Yes Yes Yes No No Yes Yes
10	Estimating Cost Rates	No <sup>7</sup>
11	Budgeting	No <sup>8</sup>

<sup>1</sup> Although the 2018 AHC does not extensively test the way in which section and inventory data is loaded and maintained, the Developer is expected to be able to load section, node and inventory data via HMDIF files using functionality available to their users.

<sup>2</sup> See Footnote 1.

<sup>3</sup> See Footnote 1.

<sup>4</sup> See Footnote 1.

<sup>5</sup> Non-overwriting of measured length (59), shrink/stretch (60 & 65) and data reversal (67) may be included in the AHC as required, but will not necessarily be included in every AHC.

<sup>6</sup> Although the 2018 AHC does not test the loading of Deflectograph, SCRIM or GripTester data, it does require SCANNER data to be loaded. CRUT, DRUT and HRM data have been dropped from UKPMS.

<sup>7</sup> The 2018 AHC does not test the way in which unit costs are entered into the system, but Developers are expected to be able to set up and use unit costs within their system. Costs are provided for the tests.



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12	Maintenance of Works Records	No <sup>9</sup>
13	Tranche 3 Automatic Pass Processing (with Condition Projection and Economic prioritisation)	No <sup>10</sup>
14	Projection of Network Trends	No <sup>11</sup>
15	Monitor Network Condition	No <sup>12</sup>

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<sup>8</sup> Dropped from UKPMS

<sup>9</sup> See Footnote 8.

<sup>10</sup> See Footnote 8.

<sup>11</sup> See Footnote 8.

<sup>12</sup> See Footnote 8.