EUROPEAN PATENT OFFICE
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 779

DATE: JANUARY 1, 2020

PROJECT RP0645

The following classification changes will be effected by this Notice of Changes:

Action	Subclass	Group(s)
SCHEME:		
Symbols Deleted:	G01R	31/02, 31/021, 31/022, 31/023 31/024, 31/025, 31/026, 31/027, 31/028, 31/04, 31/041, 31/043, 31/045, 31/046, 31/048, 31/06, 31/07
Symbols New:	G01R	31/50, 31/52, 31/54, 31/55, 31/56, 31/58, 31/59, 31/60, 31/62, 31/64, 31/66, 31/67, 31/68, 31/69, 31/70, 31/71, 31/72, 31/74
Titles Changed:	G01R	31/01, 31/013, 31/12, 31/28, 31/2801, 31/2812, 31/2853, 31/302, 31/3278
Warnings New:	G01R	31/01, 31/12, 31/50, 31/52, 31/54, 31/55, 31/56, 31/59, 31/62, 31/72
Notes New:	G01R	31/00
DEFINITIONS:		
Definitions New:	G01R	31/50, 31/54, 31/58, 31/64, 31/66, 31/72
Definitions Modified:	G01R	31/01, 31/12, 31/28, 31/2801, 31/302
Definitions Deleted:	G01R	31/02, 31/021, 31/026, 31/028

The following subclasses/groups are also impacted by this Notice of Changes (indicate subclasses/groups outside of the project scope, such as those listed in the CRL):

G01M, G01R, G11C, H01B, B60L, B81B, B81C, G01K, G08B, H02S

This Notice of Changes includes the following *[Check the ones included]:*

1. CLASSIFICATION SCHEME CHANGES

      ☒ A. New, Modified or Deleted Group(s)

      ☒ B. New, Modified or Deleted Warning(s)

      ☒ C. New, Modified or Deleted Note(s)

      ☐ D. New, Modified or Deleted Guidance Heading(s)

2. DEFINITIONS

⊠   A. New or Modified Definitions (Full definition template)

⊠   B. Modified or Deleted Definitions (Definitions Quick Fix)

3. ⊠   REVISION CONCORDANCE LIST (RCL)

4. ⊠   CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)

5. ⊠   CHANGES TO THE CROSS-REFERENCE LIST (CRL)

1. CLASSIFICATION SCHEME CHANGES

    A. New, Modified or Deleted Group(s)

SUBCLASS G01R – MEASURING ELECTRIC VARIABLES; MEASURING MAGNETIC VARIABLES (indicating correct tuning of resonant circuits H03J 3/12)

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
U	G01R 31/00	0	Arrangements for testing electric properties; Arrangements for locating electric faults; Arrangements for electrical testing characterised by what is being tested not provided for elsewhere ({measuring superconductive properties G01R33/1238;} testing or measuring semiconductors or solid state devices during manufacture {H01L22/00}; testing line transmission systems H04B3/46)	
C	G01R 31/01	1	Subjecting similar articles in turn to test, e.g. "go/no-go" tests in mass production; Testing objects at points as they pass through a testing station (testing of cables continuously passing the testing apparatus G01R 31/59; testing dielectric strength or breakdown voltage G01R 31/12)	G01R 31/01, G01R 31/12, G01R 31/59
M	G01R 31/013	2	{Testing passive components (testing relays G01R 31/3278; testing electrical windings, e.g. inductors G01R 31/72)}	
D	G01R 31/02	1	Testing of electric apparatus, lines or components, for short-circuits, discontinuities, leakage {of current}, or incorrect line connection {(G01R31/001, G01R31/005, G01R31/01, G01R31/08, G01R31/12, G01R31/24 , G01R31/26, G01R31/28, G01R31/327 , G01R31/34, G01R31/36, G01R31/40, G01R31/44 take precedence; measuring electromagnetic field leakage G01R29/0821; testing of sparking plugs H01T13/58)}	<Administrative transfer to G01R 31/50>
D	G01R 31/021	2	{Testing of cables or conductors (testing of electric windings G01R31/06; testing of insulation of cables G01R31/1272; testing LANs H04L43/50; testing line transmission systems H04B3/46)}	<Administrative transfer to G01R 31/58>
D	G01R 31/022	3	{Testing while the cable or conductor passes continuously the testing apparatus, e.g. during manufacturing}	<Administrative transfer to G01R 31/59>
D	G01R 31/023	3	{Identification of wires in a multicore cable}	<Administrative transfer to G01R 31/60>

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
D	G01R 31/024	2	{Arrangements for indicating continuity or short-circuits in electric apparatus or lines, leakage or ground faults (in electric windings G01R31/06; measuring resistance to earth G01R27/18)}	<Administrative transfer to G01R 31/50>
D	G01R 31/025	3	{Testing short circuits, leakage or ground faults (detecting failure within the drive train of electrically-propelled vehicles B60L3/0023)}	<Administrative transfer to G01R 31/50>
D	G01R 31/026	3	{Testing continuity (G01R31/44 takes precedence)}	<Administrative transfer to G01R 31/50>
D	G01R 31/027	2	{Testing of transformers (testing of electric windings G01R31/06)}	<Administrative transfer to G01R 31/62>
D	G01R 31/028	2	{Testing of capacitors}	<Administrative transfer to G01R 31/64>
D	G01R 31/04	2	Testing connections, e.g. of plugs, of non-disconnectable joints {(G01R31/31717 takes precedence; testing of connections in integrated circuits, chip-to-lead connections, bond wires G01R31/2853)}	<Administrative transfer to G01R 31/66>
D	G01R 31/041	3	{Testing of correct wire connections in electrical apparatus and circuits (details concerning insertion or connection of batteries H02J7/0045)}	<Administrative transfer to G01R 31/67>
D	G01R 31/043	3	{of releaseable connections, e.g. terminals mounted on a printed circuit board}	<Administrative transfer to G01R 31/68>
D	G01R 31/045	4	{of plugs, sockets or terminals at the end of a cable or a wire harness; of wall sockets; of power sockets in appliances}	<Administrative transfer to G01R 31/69>
D	G01R 31/046	3	{of connections between components and printed circuit boards (PCB's) (G01R31/043 takes precedence)}	<Administrative transfer to G01R 31/70>
D	G01R 31/048	4	{Details concerning testing solder joints}	<Administrative transfer to G01R 31/71>
D	G01R 31/06	2	Testing of electric windings {, e.g. of solenoids, inductors}, e.g. for polarity {(G01R31/027 and G01R31/346 take precedence; measuring number of turns, transformation ratio, or coupling factor G01R29/20; monitoring or fail-safe circuits for electromagnets H01F7/1844)}	<Administrative transfer to G01R 31/72>
D	G01R 31/07	2	Testing of fuses	<Administrative transfer to G01R 31/74>

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
T	G01R 31/12	1	Testing dielectric strength or breakdown voltage {; Testing or monitoring effectiveness or level of insulation, e.g. of a cable or of an apparatus, for example using partial discharge measurements; Electrostatic testing (G01R 31/08, G01R 31/327 and G01R 31/72 take precedence; measuring in plasmas G01R 19/0061; measuring dielectric constants G01R 27/2617; ESD, EMC or EMP testing of circuits G01R 31/002)}	
M	G01R 31/28	1	Testing of electronic circuits, e.g. by signal tracer ({EMC, EMP or similar testing of electronic circuits G01R 31/002;} testing for short-circuits, discontinuities, leakage or incorrect line connection G01R 31/50; checking computers {or computer components} G06F 11/00; checking static stores for correct operation G11C 29/00 {; testing receivers or transmitters of transmission systems H04B 17/00})	
M	G01R 31/2801	2	{Testing of printed circuits, backplanes, motherboards, hybrid circuits or carriers for multichip packages [MCP] (G01R 31/318508 takes precedence; contactless testing G01R 31/302; testing contacts or connections G01R 31/66)}	
M	G01R 31/2812	4	{Checking for open circuits or shorts, e.g. solder bridges; Testing conductivity, resistivity or impedance (of connections G01R 31/66)}	
M	G01R 31/2853	3	{Electrical testing of internal connections or - isolation, e.g. latch-up or chip-to-lead connections (G01R 31/31717 takes precedence; test of chip-to-PCB or lead-to-PCB connections G01R 31/66)}	
M	G01R 31/302	2	Contactless testing {(G01R 31/66 takes precedence)}	
M	G01R 31/3278	3	{of relays, solenoids or reed switches (measuring contact resistance G01R 27/205; high voltage magnetic switches G01R 31/3271, G01R 31/333; testing electric windings G01R 31/72; monitoring of fail safe circuits H01H 47/002)}	
U	G01R 31/44	1	Testing lamps	
Q	G01R 31/50	1	Testing of electric apparatus, lines, cables or components for short-circuits, continuity, leakage current or incorrect line connections (testing of sparking plugs H01T 13/58)	G01R 31/50, G01R 31/52, G01R 31/54, G01R 31/55,G01R 31/56
N	G01R 31/52	2	Testing for short-circuits, leakage current or ground faults	
N	G01R 31/54	2	Testing for continuity	
N	G01R 31/55	2	Testing for incorrect line connections	
N	G01R 31/56	2	Testing of electric apparatus (testing of transformers G01R 31/62; testing of connections G01R 31/66)	

Type*	Symbol	Indent Level Number of dots (e.g. 0, 1, 2)	Title "CPC only" text should normally be enclosed in {curly brackets}**	Transferred to#
N	G01R 31/58	2	Testing of lines, cables or conductors (testing of electric windings G01R 31/72)	
N	G01R 31/59	3	while the cable continuously passes the testing apparatus, e.g. during manufacture	
N	G01R 31/60	3	Identification of wires in a multicore cable	
N	G01R 31/62	2	Testing of transformers	
N	G01R 31/64	2	Testing of capacitors	
N	G01R 31/66	2	Testing of connections, e.g. of plugs or non-disconnectable joints (testing for incorrect line connections G01R 31/55)	
N	G01R 31/67	3	Testing the correctness of wire connections in electric apparatus or circuits	
N	G01R 31/68	3	Testing of releasable connections, e.g. of terminals mounted on a printed circuit board	
N	G01R 31/69	4	of terminals at the end of a cable or a wire harness; of plugs; of sockets, e.g. wall sockets or power sockets in appliances	
N	G01R 31/70	3	Testing of connections between components and printed circuit boards (G01R 31/68 takes precedence)	
N	G01R 31/71	4	Testing of solder joints	
Q	G01R 31/72	2	Testing of electric windings (testing of transformers G01R 31/62)	G01R 31/62, G01R 31/72
N	G01R 31/74	2	Testing of fuses	

*N = new entries where reclassification into entries is involved; C = entries with modified file scope where reclassification of documents from the entries is involved; Q = new entries which are firstly populated with documents via administrative transfers from deleted (D) entries. Afterwards, the transferred documents into the Q entry will either stay or be moved to more appropriate entries, as determined by intellectual reclassification; T= existing entries with enlarged file scope, which receive documents from C or D entries, e.g. when a limiting reference is removed from the entry title; M = entries with no change to the file scope (no reclassification); D = deleted entries; F = frozen entries will be deleted once reclassification of documents from the entries is completed; U = entries that are unchanged.

NOTES:
- **No {curly brackets} are used for titles in CPC only subclasses, e.g. C12Y, A23Y; 2000 series symbol titles of groups found at the end of schemes (orthogonal codes); or the Y section titles. The {curly brackets} are used for 2000 series symbol titles found interspersed throughout the main trunk schemes (breakdown codes).
- U groups: it is obligatory to display the required "anchor" symbol (U group), i.e. the entry immediately preceding a new group or an array of new groups to be created (in case new groups are not clearly subgroups of C-type groups).Always include the symbol, indent level and title of the U group in the table above.
- All entry types should be included in the scheme changes table above for better understanding of the overall scheme change picture. Symbol, indent level, and title are required for all types .
- "Transferred to" column must be completed for all C, D, F, and Q type entries. F groups will be deleted once reclassification is completed.
- When multiple symbols are included in the "Transferred to" column, avoid using ranges of symbols in order to be as precise as possible.
- For administrative transfer of documents, the following text should be used: "< administrative transfer to XX>", "<administrative transfer to XX and YY simultaneously>", or "<administrative transfer to XX, YY, ...and ZZ simultaneously>" when administrative transfer of the same documents is to more than one place.

- Administrative transfer to main trunk groups is assumed to be the source allocation type, unless otherwise indicated.
- Administrative transfer to 2000/Y series groups is assumed to be "additional information".
- If needed, instructions for allocation type should be indicated within the angle brackets using the abbreviations "ADD" or "INV": <administrative transfer to XX ADD> , <administrative transfer to XX INV>, or < administrative transfer to XX ADD, YY INV, ... and ZZ ADD simultaneously>.
- In certain situations, the "D" entries of 2000-series or Y-series groups may not require a destination ("Transferred to") symbol, however it is required to specify "<no transfer>" in the "Transferred to" column for such cases.
- For finalisation projects, the deleted "F" symbols should have <no transfer> in the "Transferred to" column.
- For more details about the types of scheme change, see CPC Guide.

B. New, Modified or Deleted Warning(s)

SUBCLASS G01R – MEASURING ELECTRIC VARIABLES; MEASURING MAGNETIC VARIABLES (indicating correct tuning of resonant circuits H03J 3/12)

Type*	Location	Old Warning	New/Modified Warning
N	G01R31/01		Group G01R31/01 is impacted by reclassification into groups G01R31/12 and G01R31/59. Groups G01R31/01, G01R31/12 and G01R31/59 should be considered in order to perform a complete search.
N	G01R31/12		Group G01R31/12 is incomplete pending reclassification of documents from group G01R31/01. Groups G01R31/01 and G01R31/12 should be considered in order to perform a complete search.
N	G01R31/50		Group G01R31/50 is impacted by reclassification into groups G01R 31/52, G01R 31/54, G01R31/55 and G01R31/56. Groups G01R 31/50, G01R 31/52, G01R 31/54, G01R31/55 and G01R31/56 should be considered in order to perform a complete search.
N	G01R31/52		Group G01R31/52 is incomplete pending reclassification of documents from group G01R31/50. Groups G01R31/50 and G01R31/52 should be considered in order to perform a complete search.
N	G01R31/54		Group G01R31/54 is incomplete pending reclassification of documents from group G01R31/50. Groups G01R31/50 and G01R31/54 should be considered in order to perform a complete search.
N	G01R31/55		Group G01R31/55 is incomplete pending reclassification of documents from group G01R31/50. Groups G01R31/50 and G01R31/55 should be considered in order to perform a complete search.
N	G01R31/56		Group G01R31/56 is incomplete pending reclassification of documents from group G01R31/50. Groups G01R31/50 and G01R31/56 should be considered in order to perform a complete search.
N	G01R31/59		Group G01R 31/59 is incomplete pending reclassification of documents

Type*	Location	Old Warning	New/Modified Warning
			from group G01R 31/01. Groups G01R 31/01 and G01R 31/59 should be considered in order to perform a complete search.
N	G01R31/62		Group G01R 31/62 is incomplete pending reclassification of documents from group G01R 31/72. Groups G01R 31/72 and G01R 31/62 should be considered in order to perform a complete search.
N	G01R31/72		Group G01R31/72 is impacted by reclassification into group G01R31/62. Groups G01R31/72 and G01R31/62 should be considered in order to perform a complete search

*N = new warning, M = modified warning, D = deleted warning

NOTE: The "Location" column only requires the symbol PRIOR to the location of the warning. No further directions such as "before" or "after" are required.

C. New, Modified or Deleted Note(s)

SUBCLASS G01R – MEASURING ELECTRIC VARIABLES; MEASURING MAGNETIC VARIABLES (indicating correct tuning of resonant circuits H03J 3/12)

Type*	Location	Old Note	New/Modified Note
N	G01R 31/00		Groups G01R 31/08, G01R 31/12, G01R 31/327, G01R 31/24, G01R 31/26, G01R 31/34, G01R 31/36, G01R 31/40, G01R 31/44 take precedence over group G01R 31/50.

*N = new note, M = modified note, D = deleted note

NOTE: The "Location" column only requires the symbol PRIOR to the location of the note. No further directions such as "before" or "after" are required.

2. A. DEFINITIONS (New)

Insert: The following new Definitions

G01R31/50

References:

Limiting references:

This place does not cover:

Testing of sparking plugs	H01T 13/58

Informative references:

Attention is drawn to the following places, which may be of interest for search:

Measuring resistance to earth	G01R 27/18
Measuring electromagnetic field leakage	G01R 29/0821
Testing of electric windings	G01R 31/72
Locating faults in cables, transmission lines, or networks	G01R 31/08
Testing dielectric strength or breakdown voltage	G01R 31/12
Testing of discharge tubes	G01R 31/24
Testing of individual semiconductor devices	G01R 31/36
Testing of circuit interrupters, switches or circuit-breakers	G01R 31/327
Testing dynamo-electric machines	G01R 31/34
Apparatus for testing electrical condition of accumulators or electric batteries	G01R 31/36
Testing power supplies	G01R 31/40
Testing lamps	G01R 31/44
Checking or monitoring of signalling or alarm systems	G08B 29/00

G01R31/54

Definition statement

This place covers:

Tests for open circuits (lack of continuity) are classified here.

References:

Informative references:

Attention is drawn to the following places, which may be of interest for search:

Testing lamps	G01R 31/44

G01R31/58

References

Limiting references

This place does not cover:

Testing of electric windings	G01R 31/72

Informative references

Attention is drawn to the following places, which may be of interest for search:

Testing of insulation of cables	G01R 31/1272
Testing line transmission systems	H04B 3/46

G01R31/64

References

Informative references:

Attention is drawn to the following places, which may be of interest for search:

Measuring of capacitance	G01R 27/2605
Go/no-go testing of capacitors	G01R 31/016

G01R31/66

References:

Limiting references:

This place does not cover:

Testing for incorrect line connections	G01R 31/55

Informative references

Attention is drawn to the following places, which may be of interest for search:

Interconnect testing	G01R 31/71
Testing of connections in integrated circuits, chip-to lead connections, bond wires	G01R 31/2853

G01R31/72

References

Limiting references

This place does not cover:

Testing of transformers	G01R 31/62

Informative references

Attention is drawn to the following places, which may be of interest for search:

Testing of armature or field windings	G01R 31/346
Measuring number of turns	G01R 29/20
Monitoring or fail-safe circuits	H01F 7/1844

2. A. DEFINITIONS (Modified)

G01R31/01

References

Limiting references

Insert: The following new Limiting references section and table

This place does not cover:

Testing dielectric strength or breakdown voltage	G01R31/12
Testing of cables continuously passing the testing apparatus	G01R31/59

Informative references

Insert: The following row in the Informative references table

Attention is drawn to the following places, which may be of interest for search:

Testing, measuring or monitoring the electrical condition of accumulators or electric batteries	G01R31/36

G01R31/12

References

Limiting references

Insert: The following new rows to the Limiting references table

This place does not cover:

Locating faults in cables, transmission lines, or networks	G01R31/08
Testing of electric windings	G01R31/72
Measuring in plasmas	G01R19/0061
Measuring dielectric properties, e.g. constants	G01R27/2617
ESD,EMC or EMP stesting of circuits	G01R31/002

G01R31/28

References

Limiting references

Insert: The following new rows to the Limiting references table

This place does not cover:

ESD, EMC, or EMP testing of circuits	G01R31/002
Testing of electric apparatus, lines, cables or components	G01R 31/50
Checking computers or computer components	G06F 11/00
Checking static stores for correct operation	G11C 29/00

Delete: The following rows from the Limiting references table

Testing arrangements in data switching networks	H04L41/06
Arrangements for testing substation (telephonic equipment) equipment	H04M1/24

Informative references

Insert: The following new rows to the Informative references table

Attention is drawn to the following places, which may be of interest for search:

Testing arrangements in data switching networks	H04L41/06
Arrangements for testing substation (telephonic equipment) equipment	H04M1/24

G01R31/2801

References

Limiting references

Insert: The following new rows to the Limiting references table

This place does not cover:

| Contactless testing | G01R31/302 |
| Testing contacts or connections | G01R31/66 |

G01R31/302

References

Limiting references

Insert: The following new row to the Limiting references table

This place does not cover:

| Testing of connections, e.g. of plugs or non-disconnectable joints | G01R 31/66 |

Delete: The following rows from the Limiting references table

| Investigating flaws by inspecting patterns on the surface of objects | G01N21/956 |
| Image analysis | G06T7/00 |

Informative references

Insert: The following new Informative references section and table

Attention is drawn to the following places, which may be of interest for search:

| Investigating flaws by inspecting patterns on the surface of objects | G01N21/956 |
| Image analysis | G06T7/00 |

2. B. DEFINITIONS QUICK FIX

Symbol	Location of change (e.g., section title)	Existing reference symbol or text	Action; New symbol; New text
G01R 31/02		Entire definition	**Delete** the entire definition
G01R 31/016	Informative references	G01R 31/028	**Replace** with G01R 31/64
G01R 31/021		Entire definition	**Delete** the entire definition
G01R 31/026		Entire definition	**Delete** the entire definition
G01R 31/028		Entire definition	**Delete** the entire definition

NOTES:
- The table above is used for corrections or modifications to existing definitions, e.g. delete an entire definition or part thereof; propose new wording or modify wording of a section, change the symbol the definition is associated with, change or delete a reference symbol, etc.
- Do not delete (F) symbol definitions.

3.   REVISION CONCORDANCE LIST (RCL)

Type*	From CPC Symbol (existing)	To CPC Symbol(s)
C	G01R 31/01	G01R 31/01, G01R 31/12, G01R 31/59
D	G01R 31/02	<Administrative transfer to G01R 31/50>
D	G01R 31/021	<Administrative transfer to G01R 31/58>
D	G01R 31/022	<Administrative transfer to G01R 31/59>
D	G01R 31/023	<Administrative transfer to G01R 31/60>
D	G01R 31/024	<Administrative transfer to G01R 31/50>
D	G01R 31/025	<Administrative transfer to G01R 31/50>
D	G01R 31/026	<Administrative transfer to G01R 31/50>
D	G01R 31/027	<Administrative transfer to G01R 31/62>
D	G01R 31/028	<Administrative transfer to G01R 31/64>
D	G01R 31/04	<Administrative transfer to G01R 31/66>
D	G01R 31/041	<Administrative transfer to G01R 31/67>
D	G01R 31/043	<Administrative transfer to G01R 31/68>
D	G01R 31/045	<Administrative transfer to G01R 31/69>
D	G01R 31/046	<Administrative transfer to G01R 31/70>
D	G01R 31/048	<Administrative transfer to G01R 31/71>
D	G01R 31/06	<Administrative transfer to G01R 31/72>
D	G01R 31/07	<Administrative transfer to G01R 31/74>
Q	G01R 31/50	G01R 31/50, G01R 31/52, G01R 31/54, G01R 31/55, G01R 31/56
Q	G01R 31/72	G01R 31/62, G01R 31/72

* C = entries with modified file scope where reclassification of documents from the entries is involved; Q = new entries which are firstly populated with documents via administrative transfers from deleted (D) entries. Afterwards, the transferred documents into the Q entry will either stay or be moved to more appropriate entries, as determined by intellectual reclassification; D = deleted entries; F = frozen entries will be deleted once reclassification of documents from the entries is completed.

NOTES:
- <u>Only</u> C, D, F, and Q type entries are included in the table above.
- When multiple symbols are included in the "To" column, do not use ranges of symbols.
- For administrative transfer of documents, the following text should be used: "< administrative transfer to XX>", "<administrative transfer to XX and YY simultaneously>", or "<administrative transfer to XX, YY, ...and ZZ simultaneously>" when administrative transfer of the same documents is to more than one place.
- Administrative transfer to main trunk groups is assumed to be the source allocation type, unless otherwise indicated.
- Administrative transfer to 2000/Y series groups is assumed to be "additional information".
- If needed, instructions for allocation type should be indicated within the angle brackets using the abbreviations "ADD" or "INV": <administrative transfer to XX ADD>, <administrative transfer to XX INV>, or < administrative transfer to XX ADD, YY INV, ... and ZZ ADD simultaneously>.
- In certain situations, the "D" entries of 2000-series or Y-series groups may not require a destination ("To") symbol, however it is required to specify "<no transfer>" in the "To" column for such cases.
- RCL is not needed for finalisation projects.

4. CHANGES TO THE CPC-TO-IPC CONCORDANCE LIST (CICL)

CPC	**IPC**	**Action***
G01R 31/02		delete
G01R 31/021		delete
G01R 31/022		delete
G01R 31/023		delete
G01R 31/024		delete
G01R 31/025		delete
G01R 31/026		delete
G01R 31/027		delete
G01R 31/028		delete
G01R 31/04		delete
G01R 31/041		delete
G01R 31/043		delete
G01R 31/045		delete
G01R 31/046		delete
G01R 31/048		delete
G01R 31/06		delete
G01R 31/07		delete
G01R 31/50	G01R 31/50	new
G01R 31/52	G01R 31/52	new
G01R 31/54	G01R 31/54	new
G01R 31/55	G01R 31/55	new
G01R 31/56	G01R 31/56	new
G01R 31/58	G01R 31/58	new
G01R 31/59	G01R 31/59	new
G01R 31/60	G01R 31/60	new
G01R 31/62	G01R 31/62	new
G01R 31/64	G01R 31/64	new
G01R 31/66	G01R 31/66	new
G01R 31/67	G01R 31/67	new
G01R 31/68	G01R 31/68	new
G01R 31/69	G01R 31/69	new
G01R 31/70	G01R 31/70	new
G01R 31/71	G01R 31/71	new
G01R 31/72	G01R 31/72	new
G01R 31/74	G01R 31/74	new

*Action column:
- For an (N) or (Q) entry, provide an IPC symbol and complete the Action column with "NEW."

- For an existing CPC main trunk entry or indexing entry where the existing IPC symbol needs to be changed, provide an updated IPC symbol and complete the Action column with "UPDATED."
- For a (D) CPC entry or indexing entry complete the Action column with "DELETE." IPC symbol does not need to be included in the IPC column.
- For an (N) 2000 series CPC entry which is positioned within the main trunk scheme (breakdown code) provide an IPC symbol and complete the action column with "NEW".
- For an (N) 2000 series CPC entry positioned at the end of the CPC scheme (orthogonal code), with no IPC equivalent, complete the IPC column with "CPCONLY" and complete the action column with "NEW".

NOTES:
- F symbols are not included in the CICL table above.
- T and M symbols are not included in the CICL table above unless a change to the existing IPC is desired.

5. CROSS-REFERENCE LIST (CRL)

Scheme references impacted by this revision project

Location of reference to be changed	Referenced subclass or group to be changed	Action; New reference symbol; New text
G01M 99/005	G01R 31/02	Replace symbol with G01R 31/50
G01R 1/0408	G01R 31/01	Replace symbol with G01R 31/59
G01R 1/0408	G01R 31/04	Replace symbol with G01R 31/66
G01R 1/067	G01R 31/04	Replace symbol with G01R 31/66
G01R 19/145	G01R 31/024	Replace symbol with G01R 31/50
G01R 19/16571	G01R 31/025	Replace symbol with G01R 31/52
G01R 27/2617	G01R 31/025	Replace symbol with G01R 31/52
G01R 29/085	G01R 31/02	Replace symbol with G01R 31/50
G08B 29/06	G01R 31/02	Replace symbol with G01R 31/55
G08B29/123	G01R 31/021, G01R 31/024	Replace symbol with G01R 31/50
G11C 5/143	G01R 31/02	Replace symbol with G01R 31/50
H01B 13/146	G01R 31/022	Replace symbol with G01R 31/59

Definitions references impacted by this revision project

Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
B60L 3/0023	G01R 31/025	Informative references	Replace symbol with G01R 31/52
B60L 3/0069	G01R 31/025	Informative references	Replace symbol with G01R 31/52
B81B	G01R 31/04	Informative references	Replace symbol with G01R 31/66
B81C	G01R 31/04	Informative references	Replace symbol with G01R 31/66
G01K 7/00	G01R 31/026	Informative references	Replace symbol with G01R 31/54
G01R 27/025	G01R 31/025	Limiting references	Replace symbol with G01R 31/52
G01R 27/18	G01R 31/025	Limiting references	Replace symbol with G01R 31/52
G01R 27/20	G01R 31/026	Limiting references	Replace symbol with G01R 31/54
G01R 27/20	G01R 31/04	Limiting references	Replace symbol with G01R 31/66
G01R 27/205	G01R 31/026	Limiting references	Replace symbol with G01R 31/54
G01R 27/205	G01R 31/04	Limiting references	Replace symbol with G01R 31/66
G01R 27/2617	G01R 31/025	Limiting references	Replace symbol with G01R 31/52

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Location of reference to be changed	Referenced subclass or group to be changed	Section of definition	Action; New reference symbol; New text
G01R 29/085	G01R 31/02	Limiting references	Replace symbol with G01R 31/50
G01R 29/085	G01R 31/023	Limiting references	Replace symbol with G01R 31/60
G01R 29/20	G01R 31/027	Limiting references	Replace symbol with G01R 31/62
G01R 29/20	G01R 31/06	Limiting references	Replace symbol with G01R 31/72
G01R 35/02	G01R 31/06	Informative references	Replace symbol with G01R 31/72
G08B 29/06	G01R 31/02	Informative references	Replace symbol with G01R 31/50
G11C 5/143	G01R 31/02	Limiting references	Replace symbol with G01R 31/50
H01B 13/14	G01R 31/022	Informative references	Replace symbol with G01R 31/59
H01B 13/146	G01R 31/022	Informative references	Replace symbol with G01R 31/59
H01B 13/24	G01R 31/022	Informative references	Replace symbol with G01R 31/59
H02S 50/00	G01R 31/02	Informative references	Replace symbol with G01R 31/50

NOTES:
- The CRL tables above are used for changes to locations **outside** of the project scope. Changes to references in scheme titles or definitions inside the project scope will be reflected in the "scheme change" template or one of the "definition" templates.
- In addition to other changes proposed in the tables above, in the column titled "Referenced subclass or group to be changed," **referenced** D symbols should indicate an action of "delete" or should indicate a replacement symbol and **referenced** F symbols should indicate a replacement symbol.
- When a reference is deleted, text related to that reference will also be deleted unless other references or a range of references associated with the same text remain.