

EUROPEAN PATENT OFFICE  
U.S. PATENT AND TRADEMARK OFFICE

CPC NOTICE OF CHANGES 1214

DATE: JANUARY 1, 2022

PROJECT RP0761

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

<u>Action</u>	<u>Subclass</u>	<u>Group(s)</u>
<b>SCHEME:</b>		
Symbols Deleted:	B61L	27/0005, 27/0011, 27/0016, 27/0022, 27/0027, 27/0033, 27/0038, 2027/0044, 2027/005, 27/0055, 27/0061, 27/0066, 27/0072, 27/0077, 27/0083, 27/0088, 27/0094
Symbols New:	B61L	27/10, 27/12, 27/14, 27/16, 27/18, 27/20, 2027/202, 2027/204, 27/30, 27/33, 27/37, 27/40, 27/50, 27/53, 27/57, 27/60, 27/70
Titles Changed:	B61L	27/00
<b>DEFINITIONS:</b>		
Definitions Modified:	B61L	27/00

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): B61L, B61L3/00, B61L15/00

This Notice of Changes includes the following:

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)

CPC NOTICE OF CHANGES 1214

DATE: JANUARY 1, 2022

PROJECT RP0761

1. CLASSIFICATION SCHEME CHANGES

A. New, Modified or Deleted Group(s)

**SUBCLASS B61L – GUIDING RAILWAY TRAFFIC; ENSURING THE SAFETY OF RAILWAY TRAFFIC (power supply lines for electrically-propelled vehicles B60M; vehicle signalling in general B60Q; brakes or auxiliary equipment B61H, B61K; point or crossing construction E01B; insulated rail joints E01B11/54; optical devices in general G02; controlling in general G05; electric communication technique H04)**

<u>Type*</u>	<u>Symbol</u>	<u>Indent Level Number of dots (e.g. 0, 1, 2)</u>	<u>Title</u> <u>“CPC only” text should normally be enclosed in {curly brackets}**</u>	<u>Transferred to<sup>#</sup></u>
M	B61L 27/00	0	Central railway traffic control systems; Trackside control; Communication systems specially adapted therefor	
D	B61L27/0005	1	{Details of track-side communication}	<administrative transfer to B61L 27/70>
D	B61L27/0011	1	{Regulation, e.g. scheduling, time tables }	<administrative transfer to B61L 27/10>
D	B61L27/0016	2	{Preparing schedules }	<administrative transfer to B61L 27/12>
D	B61L27/0022	2	{Following schedules }	<administrative transfer to B61L 27/14>
D	B61L27/0027	2	{Track-side optimisation of vehicle or vehicle train operation (on-board optimisation B61L3/006)}	<administrative transfer to B61L 27/16>
D	B61L27/0033	2	{Crew rosters and itineraries }	<administrative transfer to B61L 27/18>
D	B61L27/0038	1	{Track-side control of safe travel of vehicle or vehicle train, e.g. braking curve calculation (on-board target speed calculation and supervision B61L3/008)}	<administrative transfer to B61L 27/20>
D	B61L2027/0044	2	{using European Train Control System [ETCS]}	<administrative transfer to B61L 2027/202>
D	B61L2027/005	2	{using Communication-based Train Control [CBTC]}	<administrative transfer to B61L 2027/204>
D	B61L27/0055	1	{Testing or simulation }	<administrative transfer to B61L 27/60>
D	B61L27/0061	1	{Track-side multiple control systems, e.g. switch-over between different systems, "2 out of 3"-systems (on-board multiple control systems B61L 15/0063)}	<administrative transfer to B61L 27/30>
D	B61L27/0066	2	{Backup systems, e.g. switching when failures occur }	<administrative transfer to B61L 27/33>
D	B61L27/0072	2	{Migration, e.g. parallel installations running simultaneously }	<administrative transfer to B61L 27/37>

CPC NOTICE OF CHANGES 1214

DATE: JANUARY 1, 2022

PROJECT RP0761

<b>Type*</b>	<b>Symbol</b>	<b>Indent Level Number of dots (e.g. 0, 1, 2)</b>	<b>Title “CPC only” text should normally be enclosed in {curly brackets}**</b>	<b>Transferred to#</b>
D	B61L27/0077	1	{Track-side train data handling, e.g. vehicle or vehicle train data, position reports (on-board train data handling B61L15/0072)}	<administrative transfer to B61L 27/40>
D	B61L27/0083	1	{Track-side diagnosis or maintenance, e.g. software upgrades (on-board diagnosis or maintenance B61L15/0081)}	<administrative transfer to B61L 27/50>
D	B61L27/0088	2	{for track-side elements or systems, e.g. trackside supervision of trackside control system conditions}	<administrative transfer to B61L 27/53>
D	B61L27/0094	2	{for vehicles or vehicle trains, e.g. trackside supervision of train conditions}	<administrative transfer to B61L 27/57>
U	B61L 27/02	1	Manual systems	
U	B61L 27/04	1	Automatic systems, e.g. controlled by train; Change-over to manual control	
N	B61L 27/10	1	Operations, e.g. scheduling or time tables	
N	B61L 27/12	2	Preparing schedules	
N	B61L 27/14	2	Following schedules	
N	B61L 27/16	2	Trackside optimisation of vehicle or vehicle train operation	
N	B61L 27/18	2	Crew rosters; Itineraries	
N	B61L 27/20	1	Trackside control of safe travel of vehicle or vehicle train, e.g. braking curve calculation	
N	B61L2027/202	2	{using European Train Control System [ETCS]}	
N	B61L2027/204	2	{using Communication-based Train Control [CBTC]}	
N	B61L 27/30	1	Trackside multiple control systems, e.g. switch-over between different systems	
N	B61L 27/33	2	Backup systems, e.g. switching when failures occur	
N	B61L 27/37	2	Migration, e.g. parallel installations running simultaneously	
N	B61L 27/40	1	Handling position reports or trackside vehicle data	
N	B61L 27/50	1	Trackside diagnosis or maintenance, e.g. software upgrades	
N	B61L 27/53	2	for trackside elements or systems, e.g. trackside supervision of trackside control system conditions	
N	B61L 27/57	2	for vehicles or vehicle trains, e.g. trackside supervision of train conditions	
N	B61L 27/60	1	Testing or simulation	
N	B61L 27/70	1	Details of trackside communication	

## CPC NOTICE OF CHANGES 1214

DATE: JANUARY 1, 2022

### PROJECT RP0761

\*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.

## 2. A. DEFINITIONS (Modified)

Insert: the following modifications.

### B61L 27/00

#### Definition statement

Replace: The existing bullets with the following new bullets.

- trackside details of communication systems used in railways, e.g. network arrangements, handover from radio block centres and the like.
- dispatching and regulation systems for generating, monitoring and optimising train schedules and time tables, or supervising the railway traffic in areas.
- support systems for organising crew changes.
- train control systems using a control centre.
- test and simulation systems in the context of railway safety and guidance.
- multiple systems on trackside implementations, which include redundant or fault tolerant systems or subsystems, e.g. 2-out-of-3 processors or multiple signalling equipment for migration or multi-national use.
- data handling and diagnosis of vehicles or trains, which manage all necessary data on the train to operate the train properly, when implemented on trackside. This includes also the collection of position reports of vehicles or trains.
- trackside implementations for diagnosis of vehicle or trains as well as field elements, interlockings or the like.
- automatic driverless systems for guiding trains or autonomous vehicles through the railway network.

#### References

#### *Limiting references*

Delete: The entire Limiting references section and table rows.

DATE: JANUARY 1, 2022

PROJECT RP0761

Insert: The following new Informative references section and table rows.

**Informative references**

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

Optimisation where the calculations are performed only on board the train	<a href="#">B61L 3/006</a>
Target speed calculation and supervision performed on board the train	<a href="#">B61L 3/008</a>
Multiple systems on board, which include redundant or fault tolerant systems or subsystems, e.g. 2-out-of-3 processors or multiple signalling equipment for migration or multi-national use	<a href="#">B61L 15/0063</a>
Onboard equipment for collecting and managing vehicle data	<a href="#">B61L 15/0072</a>
Onboard equipment for diagnosis	<a href="#">B61L 15/0081</a>
Localization means for railway	<a href="#">B61L 25/02</a>

**Special rules of classification**

Replace: The exiting paragraphs in the Special rules of classification section with the following paragraphs.

Test and simulation systems for railway signalling equipment or operation are also classified under [B61L 27/60](#) in addition to other groups of [B61L](#), when local, portable devices or onboard systems are disclosed without necessarily using a control centre.

"Automatic systems" in [B61L 27/04](#) not only means driverless systems, but also where the operator purely monitors the system functioning and health as, for example, on maglev trains.

CPC NOTICE OF CHANGES 1214

DATE: JANUARY 1, 2022

PROJECT RP0761

3. REVISION CONCORDANCE LIST (RCL)

<u>Type*</u>	<u>From CPC Symbol (existing)</u>	<u>To CPC Symbol(s)</u>
D	B61L 27/0005	<administrative transfer to B61L 27/70>
D	B61L 27/0011	<administrative transfer to B61L 27/10>
D	B61L 27/0016	<administrative transfer to B61L 27/12>
D	B61L 27/0022	<administrative transfer to B61L 27/14>
D	B61L 27/0027	<administrative transfer to B61L 27/16>
D	B61L 27/0033	<administrative transfer to B61L 27/18>
D	B61L 27/0038	<administrative transfer to B61L 27/20>
D	B61L 2027/0044	<administrative transfer to B61L 2027/202>
D	B61L 2027/005	<administrative transfer to B61L 2027/204>
D	B61L 27/0055	<administrative transfer to B61L 27/60>
D	B61L 27/0061	<administrative transfer to B61L 27/30>
D	B61L 27/0066	<administrative transfer to B61L 27/33>
D	B61L 27/0072	<administrative transfer to B61L 27/37>
D	B61L 27/0077	<administrative transfer to B61L 27/40>
D	B61L 27/0083	<administrative transfer to B61L 27/50>
D	B61L 27/0088	<administrative transfer to B61L 27/53>
D	B61L 27/0094	<administrative transfer to B61L 27/57>

\* 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:

- Only 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.

CPC NOTICE OF CHANGES 1214

DATE: JANUARY 1, 2022

PROJECT RP0761

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

<u>CPC</u>	<u>IPC</u>	<u>Action*</u>
B61L 27/0005		DELETE
B61L 27/0011		DELETE
B61L 27/0016		DELETE
B61L 27/0022		DELETE
B61L 27/0027		DELETE
B61L 27/0033		DELETE
B61L 27/0038		DELETE
B61L 2027/0044		DELETE
B61L 2027/005		DELETE
B61L 27/0055		DELETE
B61L 27/0061		DELETE
B61L 27/0066		DELETE
B61L 27/0072		DELETE
B61L 27/0077		DELETE
B61L 27/0083		DELETE
B61L 27/0088		DELETE
B61L 27/0094		DELETE
B61L 27/10	B61L 27/10	NEW
B61L 27/12	B61L 27/12	NEW
B61L 27/14	B61L 27/14	NEW
B61L 27/16	B61L 27/16	NEW
B61L 27/18	B61L 27/18	NEW
B61L 27/20	B61L 27/20	NEW
B61L 2027/202	B61L 27/20	NEW
B61L 2027/204	B61L 27/20	NEW
B61L 27/30	B61L 27/30	NEW
B61L 27/33	B61L 27/33	NEW
B61L 27/37	B61L 27/37	NEW
B61L 27/40	B61L 27/40	NEW
B61L 27/50	B61L 27/50	NEW
B61L 27/53	B61L 27/53	NEW
B61L 27/57	B61L 27/57	NEW
B61L 27/60	B61L 27/60	NEW
B61L 27/70	B61L 27/70	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.



CPC NOTICE OF CHANGES 1214

DATE: JANUARY 1, 2022

PROJECT RP0761

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

CPC NOTICE OF CHANGES 1214

DATE: JANUARY 1, 2022

PROJECT RP0761

5. CROSS-REFERENCE LIST (CRL)

Scheme references impacted by this revision project

<u>Location of reference to be changed</u>	<u>Referenced subclass or group to be changed</u>	<u>Action; New reference symbol; New text</u>
B61L3/006	B61L27/0027	Replace symbol with B61L 27/16
B61L3/008	B61L27/0038	Replace symbol with B61L 27/20
B61L3/125	B61L27/0005	Replace symbol with B61L 27/70
B61L15/0063	B61L27/0061	Replace symbol with B61L 27/30
B61L15/0072	B61L27/0077	Replace symbol with B61L 27/40
B61L15/0081	B61L27/0083	Replace symbol with B61L 27/50

Definitions references impacted by this revision project

<u>Location of reference to be changed</u>	<u>Referenced subclass or group to be changed</u>	<u>Section of definition</u>	<u>Action; New reference symbol; New text</u>
B61L	B61L27/0038	Special rules	Replace symbol with B61L 27/20
B61L	B61L27/0038	Special rules	Replace symbol with B61L 27/20
B61L	B61L2027/0044	Special rules	Replace symbol with B61L 2027/202
B61L	B61L27/0005	Special rules	Replace symbol with B61L 27/70
B61L3/00	B61L27/0027	Limiting references	Replace symbol with B61L 27/16
B61L15/00	B61L27/0061	Limiting references	Replace symbol with B61L 27/30
B61L15/00	B61L27/0005	Special rules	Replace symbol with B61L 27/70

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.