Capital & Estates

# File Naming Convention

A policy for file naming convention in Capital Projects in accordance with Irish National Annex of ISO 19650 – 2:2018 within HSE Estates

| | | | | | |
|---|---|---|---|---|---|
| Doc No: | NEIS01-PY-HSE-PM-00001_File Naming Convention | | | Date: | 05.07.2023 |
| Purpose Code: | P01 | Acceptance Code: | A | Revision: | 13 |
| Revision Detail: | Description field updated (preceded by _), Revision 'O' corrected to'0' & Revision History added | | | | |
| Document Verification and Approval | | | | | |
| | Name | Role | Signature | Date | |
| Drafted By: | Michael Martin | NEIS Product Owner | | 05.07.2023 | |
| Reviewed By: | BIM Steering Group | BIM Steering Group | | N/A | |
| Approved By: | HSE C&E SMT | Senior Management Team | | N/A | |

This document it prepared to align HSE Estates File Naming Convention with ISO 19650 – 2:2018 National Annex as an integrated part of the National Estates Information System (NEIS)

## REVISION HISTORY

| REVISION NO | DATE | DETAIL |
|---|---|---|
| 0 | 15/03/2021 | First Draft |
| 1 | 23/03/2021 | Naming changed for information types (models, drawings and documents) |
| 2 | 15/04/2021 | Additional Information Types added and New Purpose Code (P0) added |
| 3 | 07/05/2021 | Purpose Codes Updated to include 2 integers |
| 4 | 10/05/2021 | Number updated to be 5 digits |
| 5 | 22/09/2021 | Number updated to be 5 digits – Name and Text updated to reflect 5 digit number |
| 6 | 13/10/2021 | Information Types updated consistent with Aconex Configuration |
| 7 | 19/01/2022 | Additional Containers (Phase & Element) added, Document View Type added, Uniclass Classification added and General Revisions |
| 8 | 28/01/2022 | Space Heating (56) added to Element or System Container Values |
| 9 | 04/02/2022 | Schematic added to Document Type |
| 10 | 04/02/2022 | Recommended by BIM Steering Group |
| 11 | 01/03/2022 | Approved HSE Capital & Estates SMT |
| 12 | 14/07/2022 | Additional Disciplines & Roles Added (CW,DA & EM) |
| 13 | 05/07/2023 | Description field updated (preceded by _) and Revision ‘O’ changed to’0’ & Revision History added |

## FILE NAMING CONVENTION

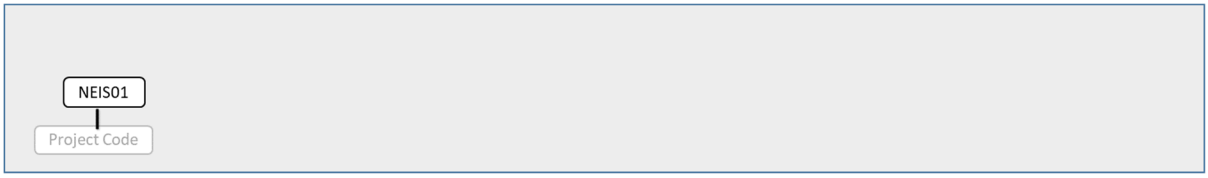
As more and more information is shared digitally, the use of structured, consistent and understandable naming conventions for information becomes vital. The National Annex to IS EN ISO 19650-2:2018 promotes the following naming of containers. Containers refer to a named persistent set of data within a file system or application data storage hierarchy. The naming convention for files is broken down into the following fields:

| Field | Obligation | Description | Format |
|---|---|---|---|
| Project | Required | Code for project | Max 6 characters |
| Subproject or Phase | Required as applicable | Unique Subproject or phase | Max 4 characters |
| Element or System | Required as applicable | Code for system reference. (Taken from Element List included in CO1 - CWMF) | Max 2 digits |
| Spatial Zone | Required as applicable | | 1 character |
| Level | Required as applicable | Code to locate info (Floor 1 etc) | 3 characters |
| Information Type | Required | Code for type of file Cost Plan, method statement etc) | 2 characters |
| Originator | Required | Code for organisation creating information. | Max 3 characters |
| Project Role | Required | Code for role of organisation ( AR - Architect etc) | Max 2 characters |
| Number | Required | Sequential file number | 4 or 5 digits |
| Description / Title | Required | An easy to understand description of the document | |
| Purpose Code | Meta-data | Code for purpose of data (information, coordination, tender etc.) | 3 characters |
| Acceptance Code | Meta-data | Code for acceptance status of data (Issued, accepted, rejected, etc.) | 1 character |
| Revision | Meta- data | Code for revision of data. | 1 digit |
| Revision Description | Meta-data | Description to identify changes associated with revision. | |

Note: the containers above highlighted in grey should occur in all unique ID's **as applicable** in the associate project, whereas the fields not highlighted should occur in all unique ID's.

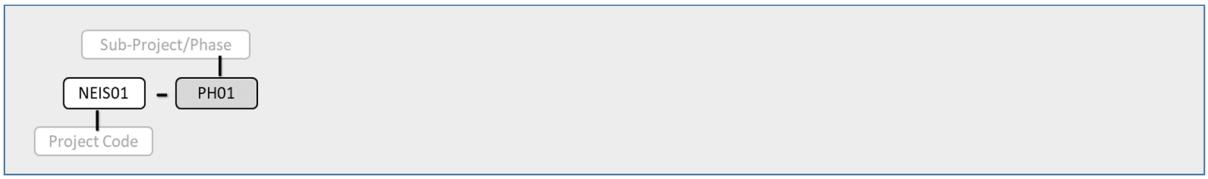
The first part of the naming convention is the ***Project code***. This needs to be from between two to six characters in length, in letters or numbers. The project code should already have been established in the EIR. All parties on the project must use the same project code and not adapt it for their own organisations.

For all HSE Projects the Project Code will be the relevant Capital Projects Reference Number and will generally consist of 5 digits or 5 digits followed by 1 capital letter (e.g. 11534 or 11534B)




The second part of the name refers to a ***Sub-Project or Phase*** of works. This is prescribed by a scope of work and should be defined at the initiation of a project. The field should be a maximum of four characters. The four character scheme will start with PH followed by a numeric identification of the associated phase, this will generally be 01, 02 etc, however 1A, 1B etc could also be considered. The code 'ZZ' should be used for multiple subprojects or phases and the code 'XX' should be used where there are no subprojects or phases. Any phasing and associated notation should be identified and detailed in the BIM Execution Plan.

| Sub Project or Phase | |
|---|---|
| PH01 | Phase 1 |
| PH02 | Phase 2 |
| PH1A | Phase 1A |
| PH1B | Phase 1B |
| PHXX | No Associated Phase |
| PHZZ | All Associated Phases |



The third part of the name refers to the ***Element or System***. As these are generally chosen from established industry codification systems to ensure consistency with the Capital Works Management Framework the use of the Building and Site Elements as identified in CO1 Note 'How to use the Costing Document (Building Works) Template will be used. This is an optional field and may be used to refer to specific elements like roofs or systems like electrical etc. The code 'Z' should be used for multiple subprojects or phases and the code 'X' should be used where there are no subprojects or phases. Please note that reserved sections within the Site and Building Elements table have been removed from the Naming Convention as have the headings (x-) and the summary sections (x9)

The following list of Elements will be utilised in the Naming convention

| **Element** | | | |
|---|---|---|---|
| **Substructure** | | **Mechanical Services** | |
| Prepared Site | 10 | Site Services (piped and ducted) | 50 |
| Ground, Earth Shapes | 11 | Heating Centre | 51 |
| Floors in Substructure | 13 | Drainage and Refuse Disposal | 52 |
| Foundations and Rising Walls | 16 | Water Distribution | 53 |
| Piled Foundations | 17 | Gases Distribution | 54 |
| | | Space Cooling | 55 |
| | | Space Heating | 56 |
| **Structure** | | Ventilation and Air Conditioning | 57 |
| Site Structures | 20 | Other Services (Mechanical) | 58 |
| External Walls | 21 | | |
| Internals Walls, Partitions | 22 | **Electrical Services** | |
| Floors, Galleries | 23 | Site Services (mainly Electrical) | 60 |
| Stairs, Ramps | 24 | Electrical Supply and Main Distribution | 61 |
| Roofs | 27 | Power | 62 |
| Frames | 28 | Lighting | 63 |
| | | Communications | 64 |
| **Structure Completion** | | Security and Protection | 65 |
| Site Enclosures | 30 | Transport | 66 |
| External Walls Completions within Openings | 31 | Other Services (Electrical) | 68 |
| Internal Walls, Partitions, Completions within Openings | 32 | | |
| Floors, Galleries: Completions | 33 | **Fixtures & Fittings** | |
| Stairs, Ramps: Completions | 34 | Site Fittings | 70 |
| Suspended Ceilings | 35 | Display, Circulation Fittings | 71 |
| Roof Completions | 37 | Work, Rest, Play Fittings | 72 |
| | | Culinary Fittings | 73 |
| **Finishes** | | Sanitary Fittings | 74 |
| Roads, Paths, Pavings | 40 | Cleaning, Maintenance Fittings | 75 |
| Wall Finishes Generally | 41 | Storage, Screening Fittings | 76 |
| Wall Finishes; Internally | 42 | | |
| Floor Finishes | 43 | **Landscaping** | |
| Stairs, Ramps: Finishes | 44 | Landscape, Play Areas | 80 |
| Ceiling Finishes | 45 | | |
| Roof Finishes | 47 | No Associated Element | XX |
| | | Multiple Elements | ZZ |


The fourth part of the name refers to the ***spatial zone***. This will be a single character used to define specific zones within the project if required. The spatial zone container should only be used on complex projects where there is a need to sub divide large site areas. The code 'Z' should be used for multiple spatial zones and the code 'X' should be used where there are no associated spatial zones

A typical zoning arrangement might be;

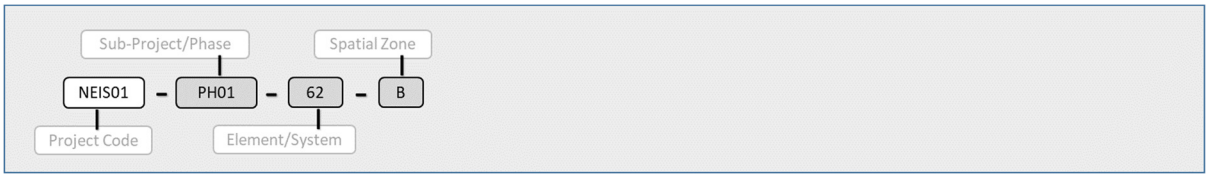
A – Zone A

B – Zone B

C – Services Compound

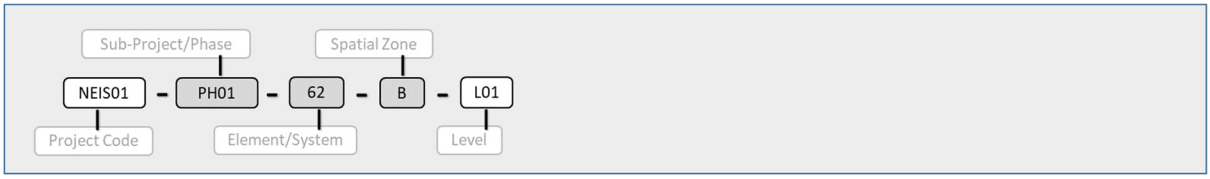
X – No Associates Zone (Site Wide)

Z – All Zones



The fifth part of the naming should be defined for each ***level***; the codes listed below should apply and should be three characters in length:

| **Levels & Locations** | |
|---|---|
| ZZZ | Multiple Levels |
| XXX | No Associated Level |
| L00 | Defined Primary Level (Ground Floor) |
| DTM | Datum Level |
| **Floor Levels** | |
| L01 | Floor 1 |
| L02 | Floor 2, etc |
| **Mezzanine Levels** | |
| M00 | Mezzanine above Primary Level (Gnd Flr) |
| M01 | Mezzanine above Level 1, etc |
| **Below Ground Floors (Basements)** | |
| B01 | Floor -1 |
| B02 | Floor -2 |



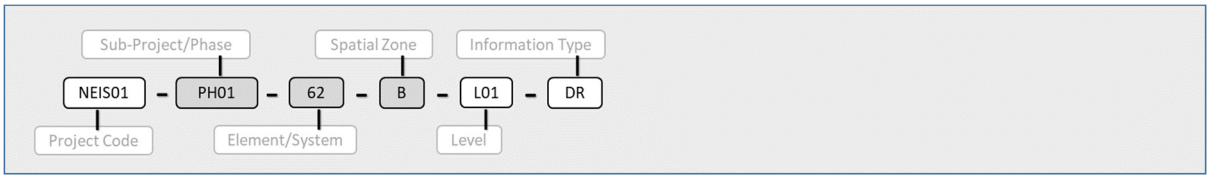
The sixth container is ***Information Type*** which aids recognition. Every container should contain a single type of information e.g. a drawing, location model, typical assembly or detail information. Standards codes for drawings, models and documents are shown below:

*Note: Some types indicated in the National Annexe are not used as they are configured as mail types in the system (eg. Correspondence, Letter, Memo, Request for Information, Submittal)*

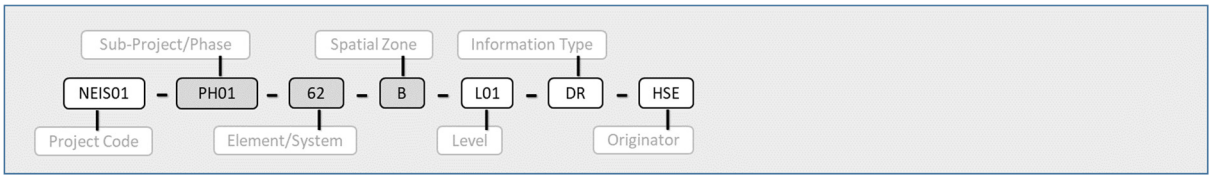
| **Information Type** | | | |
|---|---|---|---|
| Agenda | AG | Issue Sheet | IS |
| Animation File | AF | Manual | MA |
| Bill of Quantities | BQ | Method Statement | MS |
| Calculations | CA | Minutes | MI |
| Certificate | CE | Model Rendition | MR |
| Chart | CH | Model - Two dimensional | M2 |
| Clash Rendition | CR | Model - Three dimensional | M3 |
| Combined Model | CM | Permit | PT |
| Contract | CC | Photograph | PH |
| Drawing | DR | Plan | PL |
| Employer Records | ER | Policy | PY |
| Estimate | ES | Presentation | PP |
| Fee Proposal | FE | Process Workflow | PW |
| Geographical Information System (GIS) | GD | Programme | PR |
| Image (excl Photographs) | IM | Register | RG |
| Information Exchange File | IE | Report | RP |
| Invoice | IV | Room data sheet | RD |

| **Information Type** | | | |
|---|---|---|---|
| Schedule | SH | Survey | SU |
| Schematic | SC | Template | TE |
| Specification | SP | Visualisation | VS |
| Brief* | BR | Records | RE |
| Cost Plan* | CP | Schedule of Accommodation* | SA |
| Cost Report* | CT | Sketch | SK |
| File Note* | FN | Statutory Document* | ST |
| Health & Safety* | HS | Technical Data Sheets* | TS |
| Inspection & Test Plan* | IP | Tender Document* | TD |
| Pricing Document* | PD | | |

*Types not included in NA but required for HSE / GCCC Contracts




The seventh container is the ***Originator***, this is a unique code for the Organisation that authored the information container, and this should be a maximum of 3 characters. For documents originating from HSE the Originator HSE can be used.



The eighth part of the name relates to the ***Discipline*** or ***Role*** detailing explicitly what the organisation does. On larger projects there might be several different companies working on the same discipline for example architect or engineer however the second portion of the naming convention, the company designation provides differentiation. The field should be a maximum of 2 characters.

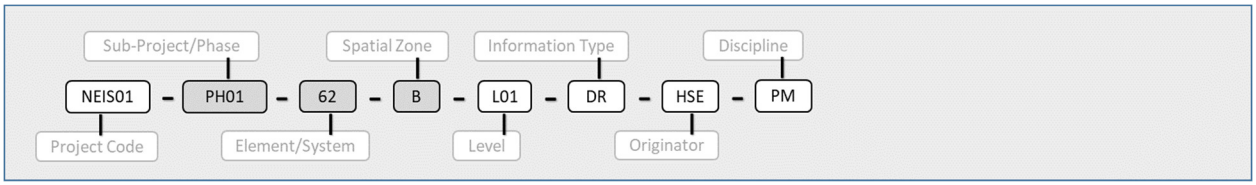
The standard codes for disciplines or roles are illustrated below.

The following are direct from IS EN ISO 19650 National Annex

| **Codes for disciplines & roles** | | | |
|---|---|---|---|
| Architect | AR | Information Manager | IM |
| Building Surveyor | BS | Landscape Architect | LA |
| Civil Engineer | CE | Life Safety Engineer | LS |
| Cost Manager/Quantity Surveyor | CM | Mechanical Engineer | ME |
| Contractor | CN | Public Health Engineer | PE |
| Drainage Engineer | DE | Planners (Physical and Environmental) | PL |
| Electrical Engineer | EE | Project Manager | PM |
| Environmental Specialist | EN | Subcontractor | SC |
| Facilities Manager | FM | Specialist Designer | SD |
| Facility Owner or Representative | FO | Structural Engineer | SE |
| Geographical & Land Surveyor | GS | Software Engineer | SF |
| Health and Safety Manager | HS | Security design / implementation specialist | SS |
| Interior Architect / Designer | IA | Communications Engineer | TE |
| Instrument and Controls Engineer | IC | Visualisation Specialist | VZ |

The following are not specific to National Annex but proposed as standard for HSE Projects:

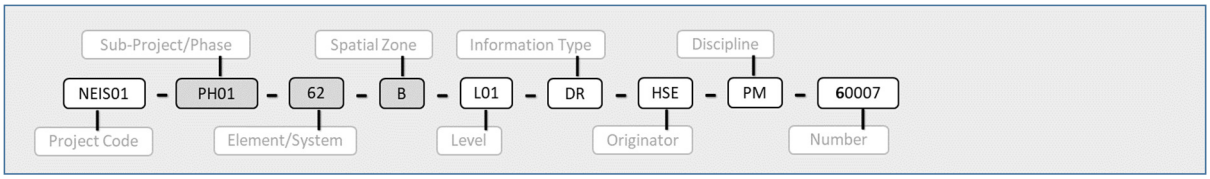
| **Codes for disciplines & roles** | | | |
|---|---|---|---|
| Z General (non-disciplinary) | ZZ | Electrical / Mechanical | EM |
| Assigned Certifier | AC | Employers Representative | ER |
| Ancillary Certifier | AN | Energy Efficient Design Expert | EX |
| BIM Information Manager | BI | Fire Safety Consultant | FS |
| BIM Manager | BM | Project Supervisor (Construction) Process | PC |
| Clerk of Works | CW | Project Supervisor (Design) Process | PD |
| Disability Access Consultant | DA | Technical Advisor | TA |
| Design Certifier | DC | | |



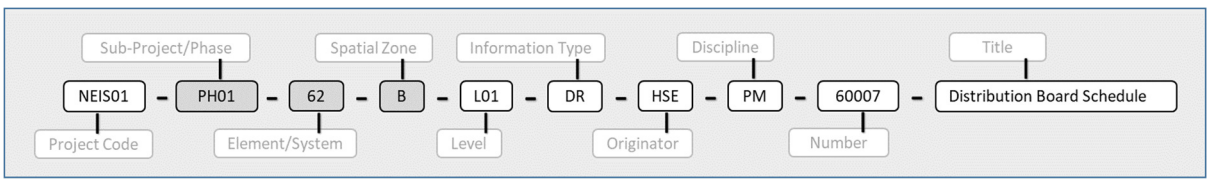
The ninth information container is the sequential ***Number*** which will be a minimum of 4 digits and a maximum of 5 digits used sequentially. Leading zeros should be used, example 0001, 0002, 0003 – The national annex notes that Metadata references associated with other fields should not be used or duplicated. Numbers may be grouped to facilitate project requirements, therefore if required an additional number (optional) can be added to the start of the 4 digit (the first digit of a 5 digit sequential number), this will be use to define the document view type (primarily for drawings).

The following table indicates the Document View Type and the associated number field to be utilised if required;

| **Document View Type** | **Number** |
|---|---|
| General | **0**0001 |
| Plans | **1**0001 |
| Elevations | **2**0001 |
| Sections | **3**0001 |
| Schedules | **4**0001 |
| Details | **5**0001 |
| Room Data Sheets | **6**0001 |
| Reflected Ceiling Plans | **7**0001 |
| 3D Views | **8**0001 |
| User Defined (Project Specific) | **9**0001 |




The document number should be followed by a ***description*** of the document purpose (or title). The description or title of the document should be concise and provide an easy to understand description of the document. There is no limit on the amount of characters to be used. The description container whilst not part of the Document Number should be included in the title and should be preceded by a '_' rather than an '-' to distinguish between document number and title.



**Information Container metadata**

The next part of the naming convention is the ***Status (suitability) codes*** which are made up of two parts, ***purpose codes and acceptance codes***. These purpose and acceptance codes are designed specifically around the construction process.

**Purpose Codes**:

| Purpose code | Definition | Explanation |
|---|---|---|
| P00 | Initiation | Information container related to initiation process for new projects |
| P01 | Information | Information container distributed to project stakeholders for the purpose of keeping stakeholders informed |
| P02 | Coordination | Information container distributed to project stakeholders for the purposes of coordinating design and construction models, deliverables, and activities |
| P03 | Statutory submission - Planning Permission | Information container related to planning regulation statutory submission activities |
| P04 | Statutory submission - Fire Safety Certificate | Information container related to fire safety statutory submission activities |
| P05 | Statutory submission - Disability Access Certificate | Information container related to access and use statutory submission activities |
| P06 | Statutory submission – Building Control Compliance | Information container related to building control statutory submission activities |
| P07 | Pre-tender submission | Information container related to pre-tender submission activities |
| P08 | Tender | Information container related to tender preparation and submission activities |
| P09 | Contract / construction | Information container that is to be included as a contract document |
| P10 | Handover | Information container that is to be included in handover activities |

**Acceptance Codes**:

| Acceptance code | Definition | Explanation |
|---|---|---|
| S | Issued | Information that is issued for a particular purpose |
| A | Accepted | Accepted for a particular purpose |
| B | Accepted subject to comments | Accepted for a particular purpose subject to comments |
| C | Rejected | Rejected for a particular purpose |
| D | Acceptance not required | Status (suitability) update not required for a particular purpose |

The final part of the naming convention is the ***Revision code***, this should be a sequential number starting with '0', should exclude prefixes and should exclude leading zeros. The number should increase sequentially by one integer and only relate to the associated information container. The BIM Execution Plan should clearly define the policy around revision control when transitioning between defined stages of the project (for example from Design to Construction), it is recommended that revision history is maintained during this transition (i.e. documents are not relabelled to revision 0 for tender issue)

Revision codes should be accompanied by a ***Revision description*** to identify the change associated with the particular revision of the information container. The description should be stored in separate metadata.

Whilst working within a contained Common Data Environment where metadata is being captured there is no requirement to separately document the status (suitability) and revision codes however it is recommended when working outside of the CDE that this information be captured in the name and within the document in the form of a document control sheet similar to that contained at the beginning of this naming convention and shown below;

| | | | | | |
|---|---|---|---|---|---|
| Doc No: | NEIS01-PY-HSE-PM-00001_File Naming Convention | | | Date: | 19.01.2022 |
| Purpose Code: | P01 | Acceptance Code: | S | Revision: | 7 |
| Revision Detail: | Additional Containers (Phase & Element) added, Document View Type added, Uniclass Classification added and General Revisions | | | | |
| Document Verification and Approval | | | | | |
| | Name | Role | | Signature | Date |
| Drafted By: | Michael Martin | NEIS Product Owner | | | 19.01.2022 |
| Reviewed By: | BIM Working Group | BIM Working Group | | | 19.01.2021 |
| Approved By: | | | | | |

**Classification**

The Architectural Engineering and Construction (AEC) Industry is rapidly moving to a unified classification system to provide a structure for all participants and disciplines in the Construction Industry. This is an essential way of identifying and managing the vast amount of information that is involved in a project and is a requirement for BIM projects. The common standard classification system for Europe is Uniclass 2015

An additional non-mandatory field can be utilised for all documents where the required Uniclass classification can be captured. This will be a free text field in the Common Data Environment where typically the Uniclass 2015 code would be recorded as detailed in the project specific BIM Execution Plan. Where this is being used the relevant Uniclass classification can be added to the document control sheet.

| Typical Uniclass 2015 Classifications | |
|---|---|
| BIM Execution Plan | PM_40_60_08 |
| Architects Model | PM_40_35_04 |
| Building Services Model | PM_40_35_10 |
| 2D Plan Drawing | PM_40_40_01 |
| Clash Detection Resolution Report | PM_40_60_12 |
| Federated Coordination Models | PM_40_60_31 |

**Model / Drawing / Document Naming (Common Data Environment)**

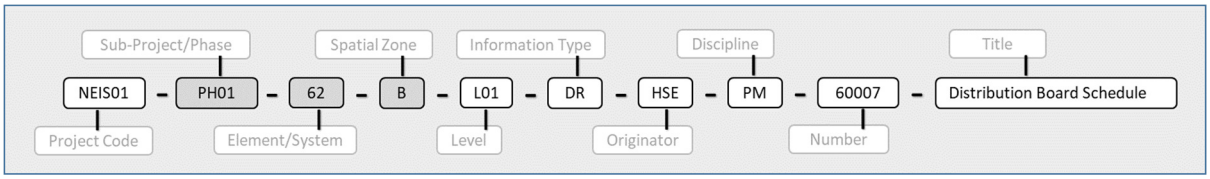
The naming for different formats of information can change depending on the data included within the various formats. The HSE have set up the Common Data Environment (utilising Oracle Aconex as the platform) and have distinguished between document types with Models and Drawings being considered differently to all other document types.

**Model and Drawing Files**

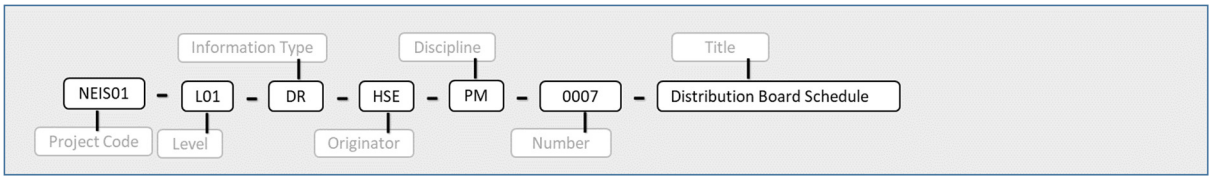
Within the CDE the following document types are classified under ***'Models and Drawings'*** for the purpose of Document Naming:

- Drawings
- 2D Model
- 3D Model
- Clash Rendition
- Combined Model
- Model Rendition File
- Schematic
- Sketch

For these document types the BIM Execution Plan will define the agreed naming strategy based on the complexity of the Project and requirements of the Client and Design Team. The common data environment can be configured to utilise all of the fields as per the convention;



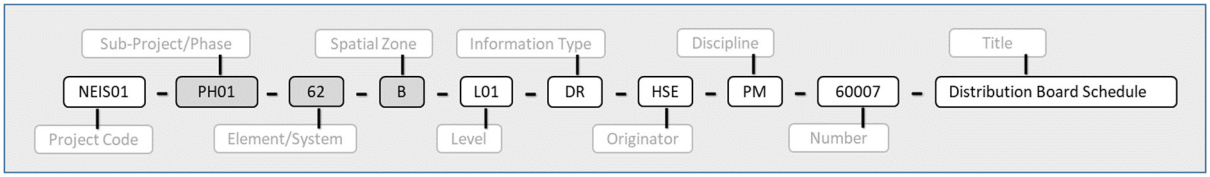

Or, for less complicated projects the team may decide to utilise only the **minimum** required field with a simple sequential numbering system (i.e. 4 digit);



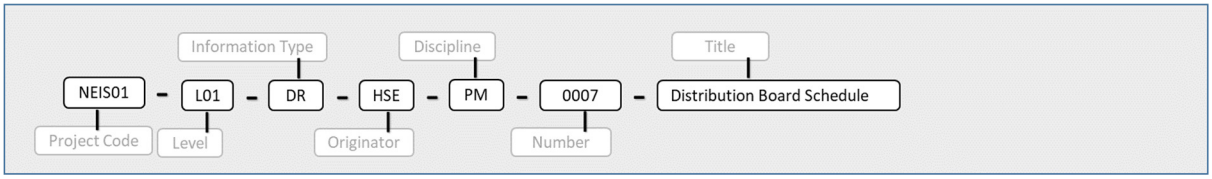

The project team can choose to include / add any of the field's shaded grey above to the minimum requirement and these will be added conforming to the location as indicated above – a combination of one or more of the optional fields can be included when defined in the BIM Execution Plan.

**Document Files**

For all other document types the BIM Execution Plan will define the agreed naming strategy based on the complexity of the Project and requirements of the Client and Design Team. The common data environment can be configured to utilise all of the fields as per the convention;

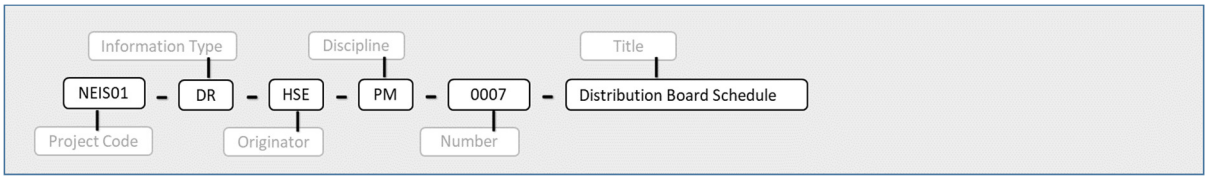



Or, for less complicated projects the team may decide to utilise only the **minimum** required field with a simple sequential numbering system (i.e. 4 digit);




The project team can choose to include / add any of the field's shaded grey above to the minimum requirement and these will be added conforming to the location as indicated above – a combination of one or more of the optional fields can be included when defined in the BIM Execution Plan.

Alternatively, the team on individual project, by agreement, and as detailed in the BIM Execution Plan may decide to use a modified numbering strategy for all 'non - model & drawing' related documents which would also remove the 'Level' container, thus reducing the number of required fields to 5. This approach should be considered with caution as it varies the naming convention within a Project.




For all Document / Drawing / Model numbering within a Project the BIM Execution Plan is critical and must define the agreed Naming Strategy within that Project. This should be agreed with all members of the Design Team and the Client and procedures included within the Project to ensure consistent use of the naming strategy, reviewed as necessary, by the Project Information Manager.