CORE CONCEPT

Street Naming and Addressing Systems Course: ISO 19160 Address Data, Plates and Registers

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Introduction:

Street naming and addressing systems, covering ISO 19160 address data, plates and registers, is a 1-week course for municipal GIS, addressing, postal and e-government teams that ends with an Addressing System Implementation Plan for a case municipality. Unnamed streets, duplicated names, irregular building numbers and address records held in conflicting databases delay ambulances, misdirect utility crews and block access to online public services. Nominees already assign names or numbers, maintain address layers or run address-based services, and learn through case studies on street centrelines, address points and register extracts. CoreConcept Training Center delivers this street naming and addressing course.

Course Objectives:

- Assess the coverage, consistency and ownership of an existing address system using street centreline, address point and service request data
- Apply a street naming policy with naming criteria, thoroughfare type rules, public consultation and approval procedures
- Select a building numbering scheme, sequential, odd and even or distance-based, and apply it to streets, plots and multi-unit buildings
- Structure address records with the ISO 19160-1 conceptual model and map them to UPU S42 address components
- Maintain and validate an address register through lifecycle states, change workflows and data quality rules
- Specify street name plates and building number plates and organise address data sharing with emergency, utility and delivery users

Target Audience:

- Municipal GIS teams responsible for street centreline, parcel and address point layers
- Addressing units responsible for assigning street names and building numbers and issuing address confirmations
- E-government service teams responsible for address lookup, citizen records and online service eligibility checks
- Postal and delivery data teams responsible for address databases, address cleansing and lookup tools
- Emergency dispatch and utility data teams responsible for geocoding call locations and customer service points
- Municipal works teams responsible for installing and maintaining street name and building number plates

Course Outline:

Day 1: Addressing Purposes, Address Anatomy and Current-State Assessment

- Address Uses in Emergency Response, Utilities, Delivery and E-Government
- Address Component Anatomy From Thoroughfare to Sub-Unit
- Addressing Gap Patterns of Unnamed Streets and Shared Addresses
- Addressing Authority Roles, Mandates and Data Ownership Mapping
- Current-State Address Coverage Assessment Using Service Request Records

Day 2: ISO 19160 Address Model, UPU S42 Components and Numbering Schemes

- ISO 19160-1 Conceptual Model Classes and Address Components
- ISO 19160-1 Address Lifecycle, Aliases and Metadata Attributes
- UPU S42 Address Elements and Rendering Template Mapping
- Odd and Even, Sequential and Grid Block Numbering Compared
- Distance-Based Numbering Intervals for Rural and Growth Areas

Day 3: Street Naming Policy, Address Assignment and Plate Specification

- Street Naming Policy Criteria for Duplicate, Commemorative and Thematic Names
- Thoroughfare Type Register and Standard Abbreviation Rules
- Street Name Proposal, Public Consultation and Council Approval Workflow
- Address Point Placement Rules for Entrances, Units and Plots
- Street Name Plate and Building Number Plate Specification Sheet

Day 4: Address Register Maintenance, Validation and Data Sharing

- Address Register Change Workflow From Building Permit to Retirement
- Address Validation Rules for Completeness, Uniqueness and Position Accuracy
- Street Renaming and Renumbering Impact and Notification Procedure
- Address Data Exchange With Emergency Dispatch Geocoding Systems
- Address API Licensing for Utilities and Delivery Firms

Day 5: Case Study on the Addressing System Implementation Plan

- Case Municipality Address Dataset Review and Gap Ranking
- Case Street Naming Decisions and Numbering Scheme Selection
- Case Address Register Data Model Mapped to ISO 19160-1
- Case Plate Installation Phasing and Data Sharing Agreements
- Addressing System Implementation Plan Completion and Peer Review

Skills You Will Gain:

- Address Coverage Assessment
- Street Naming Policy Drafting
- Building Numbering Scheme Design
- Address Data Modelling
- Address Register Validation
- Address Plate Specification
- Address Data Sharing Agreements

Why Attend This Course:

- Present an Addressing System Implementation Plan for a case municipality to the municipal GIS director and the e-government service owner
- Decide which numbering scheme, naming rule and validation threshold suit each district, from dense centres to rural growth areas
- Prevent delayed emergency responses, failed deliveries and duplicate customer accounts caused by ambiguous or unregistered addresses
- Share naming policy templates, plate specification sheets and register validation checklists with addressing and field colleagues

Conclusion:

Back at work, the participant gives the municipal GIS director, the addressing unit and the e-government service owner an Addressing System Implementation Plan that sets naming rules, a numbering scheme, an ISO 19160-1 aligned register structure, plate specifications and data sharing terms. The municipality uses it to approve naming decisions, budget plate installation and agree address feeds with emergency, utility and delivery users. After the first district is addressed under the plan, the unit should review register completeness, validation failures, plate defects and dispatch geocoding matches and refine its rules.

Frequently Asked Questions FAQ:

What should participants know before a street naming and addressing systems course?

Participants should already assign street names or building numbers, maintain address or GIS layers, or run services that depend on address data. Basic GIS map reading is expected. Bringing an anonymised extract of their own street or address data helps the case studies reflect real conditions.

How does a street naming and addressing systems course differ from a postal operations or visitor signage course?

It covers how a municipality names streets, numbers buildings, models and validates address records and shares them with service users. Postal operations courses cover sorting and delivery networks, and visitor signage courses cover directional sign families inside sites, which this course does not address.

Why does ISO 19160-1 matter in street naming and addressing systems?

ISO 19160-1 gives a conceptual model for address information that does not depend on any one national system. It lets agencies describe address components, lifecycle and aliases consistently, and supports mapping and converting address data between different address models.

What do participants take back from the street naming and addressing systems course?

Participants take back an Addressing System Implementation Plan for a case municipality, with naming decisions, a numbering scheme, a register data model mapped to ISO 19160-1, plate specifications and data sharing terms they can adapt to their own organisation.