

### NHN Completeness Levels Main Characteristics

Subject	CL1 Network linear flow construction	CL2 Water definition construction	CL3 Network construction	CL4 Toponymic construction
Network linear flow	<b>Network linear flow features (primary and secondary) must be present</b>	<i>Network linear flow features (primary and secondary) must be present</i>	<i>Network linear flow features (primary and secondary) must be present</i>	<i>Network linear flow features (primary and secondary) must be present</i>
	<i>"Level Priority" and "Flow Direction" attributes may be unknown</i>	<i>"Level Priority" and "Flow Direction" attributes may be unknown</i>	<b>"Level Priority" and "Flow Direction" attributes must be set to a known type</b>	<i>"Level Priority" and "Flow Direction" attributes must be set to a known type</i>
	<i>Network continuity not validated</i>	<i>Network continuity not validated</i>	<b>Network continuity validated</b>	<i>Network continuity validated</i>
	<i>Network directionality not validated</i>	<i>Network directionality not validated</i>	<b>Network directionality validated for "Primary", "Constructed" and "Secondary observed" features. Directionality not validated for "Secondary inferred" features</b>	<i>Network directionality validated for "Primary", "Constructed" and "Secondary observed" features. Directionality not validated for "Secondary inferred" features</i>
Hydrography	<b>Hydrographic features must be present</b>	<i>Hydrographic features must be present</i>	<i>Hydrographic features must be present</i>	<i>Hydrographic features must be present</i>
	<i>"Water Definition" attribute may be unknown</i>	<b>"Water Definition" attribute must be set to a known water definition type</b>	<i>"Water Definition" attribute must be set to a known water definition type</i>	<i>"Water Definition" attribute must be set to a known water definition type</i>
		<b>Mimimum : distinction between lakes, rivers and oceans (littoral)</b>	<i>Mimimum : distinction between lakes, rivers and oceans (littoral)</i>	<i>Mimimum : distinction between lakes, rivers and oceans (littoral)</i>
Manmade	<b>Manmade features must be present</b>	<i>Manmade features must be present</i>	<i>Manmade features must be present</i>	<i>Manmade features must be present</i>
	<b>Minimum : Dams and Dike/Levee</b>	<i>Minimum : Dams and Dike/Levee</i>	<i>Minimum : Dams and Dike/Levee</i>	<i>Minimum : Dams and Dike/Levee</i>
Island	<i>Some islands may be missing</i>	<i>Some islands may be missing</i>	<i>Some islands may be missing</i>	<b>All islands present</b>
Toponyms	<b>Toponyms must be present</b>	<i>Toponyms must be present</i>	<i>Toponyms must be present</i>	<i>Toponyms must be present</i>
	<i>Toponyms are present - as attributes to features or - as Named features whether or not the topographic feature exists</i>	<i>Toponyms are present - as attributes to features or - as Named features whether or not the topographic feature exists</i>	<b>Toponyms are present : - as attributes if the topographic entity exists - as Named features if the topographic entity does not exist</b>	<i>Toponyms are present : - as attributes if the topographic entity exists or - as Named features if the topographic entity does not exist</i>
	<i>The toponymic source is not necessarily the official (eg source can be names that were on NTDB maps)</i>	<i>The toponymic source is not necessarily the official (eg source can be names that were on NTDB maps)</i>	<i>The toponymic source is not necessarily the official (eg source can be names that were on NTDB maps)</i>	<b>The toponymic source must be official and up-to-date</b>
	<i>Named features can have a temporary geometry (e.g. Bay = point)</i>	<i>Named features can have a temporary geometry (e.g. Bay = point)</i>	<i>Named features can have a temporary geometry (e.g. Bay = point)</i>	<b>Proper Geometry is created for named feature (e.g. Bay = Polygon)</b>
	<i>Toponymic continuity on the network not validated</i>	<i>Toponymic continuity on the network not validated</i>	<b>Toponymic continuity on the network validated</b>	<i>Toponymic continuity on the network validated</i>
	Events	<b>Events crossing a network feature must be present</b>	<i>Events crossing a network feature must be present</i>	<i>Events crossing a network feature must be present</i>
Watershed limit	<i>Consistency between features and watershed limit not validated</i>	<i>Consistency between features and watershed limit not validated</i>	<b>Consistency between features and watershed limit validated</b>	<i>Consistency between features and watershed limit validated</i>

Note : Only delimiters and junctions corresponding to existing hydrographic features are present for each completeness level