

NHN Completeness Levels Main Characteristics
 (Applicable per NHN Work Unit or drainage basin)

* : Exceptionally, some Network Linear Flow features may be missing, for example due to software limitations.

Subject	NHN-CL1	NHN-CL2	NHN-CL3	NHN-CL4
	Network	Waterbody Definition	Data Continuity	Toponymy Upgrade
Network Linear Flow feature	Network Linear Flow features must be present, unless exception*	Network Linear Flow features must be present, unless exception*	"Primary" and "Secondary" Network Linear Flow features must be present	"Primary" and "Secondary" Network Linear Flow features must be present
	<i>"Level Priority" and "Flow Direction" attributes may be "Unknown"</i>	<i>"Level Priority" and "Flow Direction" attributes may be "Unknown"</i>	"Level Priority" and "Flow Direction" attributes must be set to a known value	"Level Priority" and "Flow Direction" attributes must be set to a known value
	<i>Network Linear Flow features continuity not validated</i>	<i>Network Linear Flow features continuity not validated</i>	Network Linear Flow features continuity validated	Network Linear Flow features continuity validated
	<i>Network Linear Flow feature directionality not validated</i>	<i>Network Linear Flow feature directionality not validated</i>	Network Linear Flow feature directionality validated for "Primary", "Constructed" and "Secondary:Observed" features. Directionality not validated for "Secondary:Inferred" features	Network Linear Flow feature directionality validated for "Primary", "Constructed" and "Secondary:Observed" features. Directionality not validated for "Secondary:Inferred" features
Hydrography	Single Line Watercourse and Waterbody features must be present	Single Line Watercourse and Waterbody features must be present	Single Line Watercourse and Waterbody features must be present	Single Line Watercourse and Waterbody features must be present
	<i>The "Water Definition" attribute value may be "Unknown"</i>	The "Water Definition" attribute must be set to a known value	The "Water Definition" attribute must be set to a known value	The "Water Definition" attribute must be set to a known value
		Mimimum : Distinction between lakes, watercourses and ocean (Littoral)	Mimimum : Distinction between lakes, watercourses and ocean (Littoral)	Mimimum : Distinction between lakes, watercourses and ocean (Littoral)
Manmade Hydrographic Entity feature	Manmade features must be present	Manmade features must be present	Manmade features must be present	Manmade features must be present
	Minimum : Dam and Dike/Levee features must at least be present	Minimum : Dam and Dike/Levee features must at least be present	Minimum : Dam and Dike/Levee features must at least be present	Minimum : Dam and Dike/Levee features must at least be present
Island feature	<i>Some Islands may be missing</i>	<i>Some Islands may be missing</i>	<i>Some Islands may be missing</i>	All Islands must be present
Toponyms (Geographical Names)	Toponyms must be present	Toponyms must be present	Toponyms must be present	Toponyms must be present
	<i>Toponyms are present : - as feature attributes or - as Named Features whether or not the corresponding topographic features exist</i>	<i>Toponyms are present : - as feature attributes or - as Named Features whether or not the corresponding topographic features exist</i>	Toponyms are present : - as feature attributes when topographic features exist or - as Named Features when topographic features do not exist	Toponyms are present : - as feature attributes when topographic features exist or - as Named Features when topographic features do not exist
	<i>The toponymic source may be a nonofficial source (e.g. The National Topographic Data Base (NTDB))</i>	<i>The toponymic source may be a nonofficial source (e.g. The National Topographic Data Base (NTDB))</i>	<i>The toponymic source may be a nonofficial source (e.g. The National Topographic Data Base (NTDB))</i>	The toponymic source must be official and up-to-date
	<i>Named Features' geometry or spatial representation may be temporary (e.g. a bay having a point geometry)</i>	<i>Named Features' geometry or spatial representation may be temporary (e.g. a bay having a point geometry)</i>	<i>Named Features' geometry or spatial representation may be temporary (e.g. a bay having a point geometry)</i>	Named Features' geometry or spatial representation must be appropriate (e.g. a bay having a polygon geometry)
	<i>Network toponymic continuity not validated</i>	<i>Network toponymic continuity not validated</i>	Network toponymic continuity validated	Network toponymic continuity validated
Event features	Events stemming from a geometric intersection must be present	Events stemming from a geometric intersection must be present	Events stemming from a geometric intersection must be present	Events stemming from a geometric intersection must be present
NHN Dataset Limit	<i>Consistency between features and NHN Work Unit Limit not validated</i>	<i>Consistency between features and NHN Work Unit Limit not validated</i>	Consistency between features and NHN Work Unit Limit validated	Consistency between features and NHN Work Unit Limit validated
Note :	<i>For data structure purposes, only Delimiters and Hydro Junctions corresponding to existing NHN features are present at each NHN completeness level.</i>			