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Item 9 e) of the provisional agenda*

National standardization: Toponymic guidelines for map editors and other editors.

Toponymic guidelines for international use by map editors and other editors for the Netherlands

Submitted by the Netherlands **

^{*}E/CONF.105/1.

^{**} Prepared by Jasper Hogerwerf, Ferjan Ormeling and Tjeerd Tichelaar

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Summary

The fifth update of the "Toponymic guidelines for international use by map editors and other editors" includes minor editorial corrections to the earlier version presented at the Tenth United Nations Conference held in New York in 2012, and a major extension on pronunciation.

^{*) *} E/CONF.101/1.

^{**)} Prepared by Jasper Hogerwerf, Ferjan Ormeling and Tjeerd Tichelaar

^{***) -}First edition published as working paper no 5 submitted to Twelfth UNGEGN Session 1986

⁻Second edition submitted as Information paper 6, Fifth UNCSGN, 1987

⁻Third edition submitted as working paper 2 to Sixth UNCSGN, May 1992

⁻Fourth edition submitted as working paper 31 to Tenth UNCSGN, December 2011

⁻Fifth edition submitted to Eleventh UNCSGN

TOPONYMIC GUIDELINES FOR MAP EDITORS AND OTHER EDITORS - THE NETHERLANDS¹

A. Languages

1. The Netherlands is a unilingual country, Dutch being the only nation-wide official language. The Frisian minority language has an official status in the province of Fryslân only.

National language

2. The national language is Dutch in its standard form, written in the Roman script.

The Dutch alphabet

A a	Ηh	Оо	V v
Вb	Ιi	Pр	W w
Сc	Jј	Qq	Хx
D d	Κk	Rr	Yу
Еe	L 1	Ss	$\mathbf{Z}\mathbf{z}$
Ff	M m	T t	
Gg	N n	U u	

3. In addition to the normal alphabetical sequence, some foreign or archaic influences on geographical names have led to the incorporation of non-standard letters such as vowels with diaereses and accents in some geographical names. Furthermore ë, ï, ö and ü may appear in vowel clusters in Dutch words and names for marking a separate pronunciation of the vowels.

In the Dutch alphabet the vowels with diacritical marks come under A, E, I, O and U respectively. Hyphens, points and blanks are disregarded in the alphabetical order.

The letters *i* and *j* that together form the Dutch digraph *ij* are not separated from each other in spacedout lettering. This applies to both capitals and lower case. In indices and dictionaries it is often listed under the sequence i-j (between i-h and i-k), but incidentally before or after y.

Spelling rule for Dutch geographical names in the Netherlands

- 4. The rules given below have been in use by the three main surveying and mapping organizations: "Topographic Survey" (Topografische Dienst, now incorporated in Kadaster, the Netherlands' Cadastre, Land Registry and Mapping Agency), the "Hydrographic Service" (Dienst der Hydrografie) and Rijkswaterstaat (the governmental agency for public works and water management) since 1969. To improve international exchangeability, the Hydrographic Service follows the International Charts Specification of the International Hydrographic Organization.²
- 5. Geographical names are as yet not subject to the general spelling rules. They are, rather, spelled in the customary form approved by local government. However, in the following respects Dutch geographical names comply with the general spelling rules for the Dutch language, except for individual cases where deviating officially approved versions occur.

Capitalization

- i. Articles and prepositions at the beginning of geographical names are capitalized, unless abbreviated.
 - Examples: Het Loo, Den Helder, Ter Aalst. But: 't Harde, 's-Hertogenbosch ('t = het; 's- = des).
- ii. The incipients of all other disconnected name parts, with the exception of articles, prepositions and conjunctions, are capitalized.
 - Examples: Nederhorst den Berg, Kanaal van Terneuzen naar Gent, Millingen aan de Rijn.
- iii. When names written in one word are divided, because of lack of space, the incipient of the second and following parts are not capitalized.

Example: Westerwoldse A \rightarrow Wester-

woldse A

iv. The grapheme IJ ij is regarded as one letter, so when capitalized should be written IJ instead of

Examples: IJsselmeer, IJmuiden.

v. Derivations of geographical names, such as adverbs or compound forms remain capitalized. Examples: Rijnoevers; Noordzeekust; Nederlandse inzending.

Use of one or more words and hyphenization

Current Dutch orthographic practice separates the parts of compound geographical names consisting of an adjective and a non-generic name element with a hyphen, also in derived forms.

Examples: Frans-Vlaanderen, Belgisch-Limburg, Wit-Rusland, Centraal-Azië,

Amsterdam-Noord, Oost-Souburg, Latijns-Amerika, Latijns-Amerikaanse stranden. But:

Hollands Diep ("diep" is a generic term denoting a navigable stream or canal).

A hyphen is used when words are divided and when the meaning 'from-towards' (as for example in Amsterdam-Rijnkanaal) should be conveyed or: when a municipality name is a combination of two place names, e.g. Etten-Leur.

A hyphen is also used for separating the hagionymic prefix *Sint*- or its abbreviation *St.*- from a proper

Examples: Sint-Annaland, St.-Jozef.

Name parts are written separately (not joined by hyphen) in the following cases:

- i When adjectives ending in -e are followed by substantive name elements. Note that adjectives ending in the archaic genitive case suffix -er are commonly integrated with the nominative name element. Examples: Kleine Es, Oude IJssel, Delftse Schie, Groenlose Slinge, Fries(ch)e Wad, Hoornse Meer; but: Amelanderwad, Zuidlaardermeer.
- When one of the parts of a compound name is an article. Articles are de, het and een, but occur also in atrophied form 't or in their fossilized case endings den, des, der.

Des can be abbreviated into 's, but as such will be joined by hyphen to the specifics.

Examples: Den Helder, De Zilk, Het Loo, Nederhorst den Berg.

But: 's-Hertogenbosch, 's-Gravenhage.

With ordinals or superlatives

Examples: Eerste Valthermond, Achterste Diep.

With conjunctions and prepositions that connect name parts

Examples: Bergen op Zoom, Val van Urk.

With proper names and numerals preceded by designations denoting the kind of geographical object.

Examples: Ambt Delden, Boswachterij Schoorl, Fort Rammekens, Sluis Drie.

With inflected compass directions ending in -elijk or -elijke. But uninflected compass directions remain linked by hyphen.

Examples: Westelijk Kanaal. But: Oost-Vlaanderen, Amsterdam-Zuid.

vii When the first part of a compound name is a personal name written in two words.

Example: Anna Jacobapolder

viii With weak past participles.

Example: Verlengde Hoogeveense Vaart.

It is important to note that at present this orthographic practice is not yet universally accepted throughout the Netherlands, and deviations occur frequently, sanctioned by official and/or customary use.

Ad i: Adjectives not ending in -e or -er in most cases are joined by hyphen to the proper nouns in

Examples: Nieuw-Buinen, Oud-Zuilen. But: Blauwe Sluis, Oude Rijn

Pronunciation of Dutch geographical names

6. Accents in Dutch geographical names most commonly fall on the first syllable, but there is no general rule.

Pronunciation key

7. The pronunciation of consonants in Northern Standard Dutch does not differ markedly from that in English with a few exceptions:

spelling	pronunciation	example	IPA example
	IPA alphabet	_	_
g	$[\gamma]$, $[x]$ or $[\chi]$	Geleen	[yəˈleːn], [xəˈleːn]
ch	[x] or [χ]	Enschede	[ˈɛnsxəde:]
sch	[sx]; at word end [s]	Scheemda; 's-Hertogenbosch	['sxe:mda]; [ˌsɛrto:ɣən'bəs]
p;t;k	[p];[t];[k] (unaspirated)	Krommenie	[ˌkrəməˈni]
kh	[k]	Rijckholt	[ˈrikəlt]
th	[t]	Nuth	[net]
r	[r], [R], [f] or [I]	Roden	[ˈroːdən]
W	[υ]	Weesp	[ve:sp]
ng	[ŋ]	Groningen	[ˈɣroːnɪŋən]

The pronunciation of vowels differs considerably from that in English. A short outline of the pronunciation is given below. '+OS' means: in open syllable or final, e.g. the *a* in 'dagen' or 'weldra'; '+CS' means: in closed syllable, e.g. the *a* in 'dag, bakken'.

spelling	pronunciation	example	IPA example
	IPA alphabet		
a+CS	[a]	Halle	[ˈhɑlə]
aa, a+OS	[a:] or [a]	Haarlem, Scheemda	['haːrlɛm], ['sxeːmda]
ae	[a:]	Baexem, Maeslantkering	['baːksəm], ['maːslantˌkerɪŋ]
e+CS	[ɛ] or [ə]	Meppel	[ˈmɛpəl]
e+OS	[e:] or [ə]	Ede	[eb:ə']
ee	[e:]	Geleen	[ɣəˈleːn]
i+CS	[1]	Twisk	[tvisk]
i+OS	[i]	Didam	[diˈdam]
o+CS	[5]	Schiphol	[sxɪpˈfiɔl]
00, 0+OS	[o:] or [o]	Hoge Noord, Ruurlo	[ˌhoːɣəˈnoːrt]], [ryːrlo]
u+CS	[Y] or [θ]	Putten, Zutphen	[ˈpʏtən], [ˈzetfən]
uu, u+OS	[y:] or [y]	Culemborg, Ruurlo	[ryːrlo], [ˈkyləmˌbərx]
y	[i] or [ε <u>i</u>]	Yde, Ysselsteyn	[ˈidə], [ˈɛi̯səlˌstɛi̯n]
au, ou	[au̯] or [ʌu̯]	Gouda, Lauwersmeer	[ˈxau̯daː], [ˌlʌuʊərsˈmeːr]
ei, ij	[ε <u>i</u>]	Rijn, Eindhoven	[rein], [ˈeinthoːvən]
eu	[ø] or [ø:]	Heusden	[ˈĥøːzdən]
ie+CS	[i]	Giethoorn	[ˈɣitɦoːrn]
ie+OS	[i:] or [i]	Dieren, Haarlemmerliede	[ˈdiːrən], [ˌɦaːrlɛmərˈlidə]
oe	[u] or [uː]	Woerden, Ten Boer	[ˈvurdən], [tɛn ˈbuːr]
oi	[o:]	Goirle	[ˈsoːrlə]
ui, uij	[œy]	Muiden, Cuijk	[mœydən], [kœyk]
ieuw	[iu]	Nieuwe Maas	[ˌniuə̂ˈmaːs]

The pronunciation of the following geographical names either deviates from the general rules outlined above, or cannot be accurately deduced from them (this list is by no means exhaustive):

spelling	pronunciation	spelling	pronunciation	spelling	pronunciation
Acquoy	[aˈkoːj]	Lievelde	[ˈlivəldə]	Tienray	[ˈtinraːj]
Almere	[al'me:rə]	Luyksgestel	[ˈlœyksˌɣɛstəl]	Tungelroy	[ˈteŋəlˌroːj]

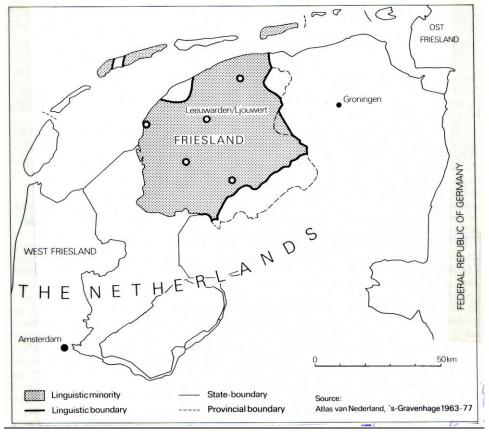
Amby	[ˈambi]	Mesch	[mɛʃ]	Tynaarlo	[tiˈnaːɾlo]
Anna Paulowna	[ana pay lo:na]	Mheer	[meːr]	Veghel	[ˈvɛɣəl]
Barnflair	['ba:rnfle:r]	Nagele	[ˈnaːɣələ]	Venray	[ˈvɛnraːj]
Bergschenhoek	[ˌbɛrxsənˈɦuk]	Nuenen	[ˈnynən]	Vriescheloo	[ˈvrisəˌloː]
Boukoul	[ˈbukul]	Nijswiller	[ˈnisˌʊɪlər]	Walcheren	[ˈvɑlyərən]
Bourtange	[ˌbuːrˈtaŋə]	Oirlo	[ˈuːrlo]	Wanrooij	[ˈvanroːj]
Bronneger	[ˈbrɔnəxər]	Oldeberkoop	[ˌɔldəbɛrˈkoːp]	Wehl	[ve:1]
Charlois	[ˈʃarloːs]	Onderdendam	[ˈondərdɛnˈdam]	Westenesch	[ˈvɛstənˌɛs]
Enschede	[ˈɛnsxəˌdeː]	Opende	[sp'Sendə]	Wijchen	[ˈvixən]
Gebroek	[ˌɣəˈbruk]	Paesens	[ˈpaːsəns]	Wijdenes	[ˈvɛi̯dəˈnɛs]
Geleen	[ɣəˈleːn]	Puiflijk	[ˈpœyflək]	Wijhe	[ˈʊɛiə]
Goirle	[ˈɣoːrlə]	Renesse	[rəˈnɛsə]	Wijlre	[ˈviːlreː]
Huissen	[ˈfiysən]	Rhenoy	[rəˈnɔi]	Yde	[ˈidə]
Hurwenen	[ˌĥərˈveːnə]	Rijckholt	[ˈrikəlt]	Yerseke	[ˈiːrsəkə]
Lemele	[ˈleːmələ]	Slenaken	[ˈsleːˌnaːkən]	Ysselsteyn	[ˈɛi̯səlstɛi̯n]
Lemiers	[le mi:rs]	Stramproy	[ˈstramproːj]	Zonnemaire	[sr:am'enc:rə]
Leveroy	[ˈleːvəroːj]	Texel	[ˈtɛsəl]		

The use of dialect

8. Only dialect spellings codified before the general acceptance of the Dutch standard language are recognized. All other dialect names are converted into the standard language.

Regional language³

9. (West) Frisian is a Germanic language akin to Dutch and English. It is an official language in the province of Fryslân or Friesland (Frisia), spoken by about 350.000 inhabitants as their mother tongue (2011). The Frisian language is used and taught officially in educational and religious institutions, as well as in local and provincial government. It is written in the Roman script. Figure 1 shows the area with a majority of Frisian-speaking inhabitants.



The Frisi	ian alphabet			
10.	A a	G g	M m	Τt
	Вb	H h	N n	U u
	(C)c	I i, Y y	Оо	(V) v
	D d	Jј	Pр	W w
	Εe	Κk	Rr	(Z)z
	Ff	L1	Ss	

11.In addition to the normal alphabetical sequence in the Frisian alphabet, the letters A \hat{a} , E \hat{e} , O \hat{o} and U \hat{u} occur. In the Frisian alphabet they come under A, E, O and U respectively. Y y is a positional variant of I i and comes under I i in the alphabet. C only appears in the combination ch and as such never at the beginning of a word. C, v and z may at the beginning of a word only occur in proper names that are part of a toponym, e.g. Vosseloane.

Spelling rules for the Frisian geographical names in the Netherlands

12. The non-phonological spelling rules are the same as for Dutch. The phonological spelling rules of geographical names comply with the general spelling rules for Frisian. However, due to the spelling change of 1980, a lot of deviating spellings occur.

Pronunciation of the Frisian alphabet

13. The pronunciation of consonants in Frisian does not differ markedly from that in English and Dutch with a few exceptions:

spelling	pronunciation IPA alphabet	other remarks
g	[g]	at word begin
g	[γ]	between vowels
ch	[x]	
p;t;k	[p];[t];[k]	unaspirated
r	[r]	mute before d,t,s.n,l
w	[v],[v]	

The pronunciation of vowels is quite different from both the English and Dutch pronunciation: ('+OS' means: in open syllable, e.g. the a in <u>dagen:</u>' +CS' means: in closed syllable, e.g. the a in <u>dag</u>, bakken.)

spelling	pronunciation IPA alphabet	spelling	pronunciation IPA alphabet
a+CS	[a] or [ò] before d,t,s,n,l	û	[u] or [u:]
aa, a+OS	[a:]	au, ou	[ɔu̯]
e+CS	[ε]	ea	[ɪə̯] or [jɛ]
ee, e+OS	$[e^i]$	ei	[εɪ],[aɪ],[ɔɪ]
i+CS	[e]	eo	[ø͡ᢒ]
ii, i+OS	[i] or [i:]	eu	[œo]
o+CS	[o] or [ɔ]	ie	[ia] or [jɪ]
oo, o+OS	$[o^{u}]$	ij	[13]
u+CS	[y] or [jø]	oa	[oạ] or [wa]
ú, u+OS	[y] or [y:]	oe	[ua̯]
y	[i]	ue	[<u>yə</u>] or [jy]
â, ô	[5:]	ui	[<u>ə</u> o]
ê	[ε:]	uo	[wo]

Frisian geographical names

14. The present situation can be considered as a transitional stage in respect to the use of Frisian toponyms on official documents. This leads to a somewhat fuzzy situation. In many municipalities in Fryslân, street names are, completely or partially, officially spelled in Frisian. Some municipalities bear Frisian names. The province officially has a monolingual (Frisian) name (Fryslân), but a lot of villages and towns have bilingual names. Several municipalities have officially spelled the names of their villages and towns unilingually in Frisian. This local usage is also reflected on the sign posts and road maps.

Street names and names of (farm)houses and other buildings are rendered in the way they appear on the object, hence Frisian if the name is given in that language. Major objects, like field names, municipalities, water bodies, may be in Frisian, unless an official document gives a Dutch version. In practice, this may lead to strange mixtures on the map. The unilingual Frisian place names are given in Frisian, with the Dutch version added in a smaller font below. Unilingual Dutch place names are given in Dutch, with the Frisian version added in a smaller font below. Frisian place names are all written in italics, to distinguish the Frisian and Dutch place names from each other. In 2005 yje Province of Fryslân determined a unilingual Frisian spelling for almost 1000 water bodies (see K.F.Gildemacher and A.P.Versloot – Waternamen. Leeuwarden: Penn Communicatie 2005). The Frisian water names became the sole official names in 2007; at the same time, the unilingual use of dialect hydronyms became official in some parts of Fryslân where non-Frisian dialects are spoken, notably the Low Saxon and Low Franconian dialects of the municipalities of Ooststellingwerf, Weststellingwerf, Kollumerland en Nieuwkruisland and Het Bilt.

B. Names authorities and names standardization

15. In 1947 the Netherlands government delegated the task to compile a standardized list of geographical names to the joint Netherlands-Belgian Orthographic Committee (Nederlands-Belgische Woordenlijst Commissie). The Netherlands delegation in this committee started work in 1962 and finished its endeavor in 1973 when a list with proposed standardized spellings for about 40,000 toponyms was presented to the Minister for Education for official endorsement, which has not been authorized yet. The Netherlands delegation to the joint Netherlands-Belgian Orthographic Committee has in itself no official authority to implement the orthography for geographical names. The committee is not active at the moment. The list can be obtained at the P.J. Meertens Institute, Royal Netherlands Academy of Arts and Sciences, info@meertens.knaw.nl

16. In its list the committee also covered the Dutch versions of geographical names in the province of Fryslân - Frisian versions of geographical names in Friesland have been standardized at the request of the Frisian provincial government by the Toponymic Working Group of the Frisian Academy. A list with all toponyms in the province of Fryslân, that occur on the map at the scale of 1:100 000, in their correct Frisian spelling was published in 1982.

17. Until the Minister for Education sees fit to officially endorse these name lists, the Topographic Survey and the Hydrographic Service will continue to present on their maps the customary spellings used in official registrations.

C. Source material

Maps

18. Topographic maps at the scale of 1:25,000, based on TOP25 raster data, currently published on demand by Kadaster⁵. All topographic maps on the scales 1:25,000, 1:50,000, 1:250,000 and 1:400,000 produced over the past 200 years are online consultable at www.topotijdreis.nl.

Netherlands Small Crafts charts, published at scales between 1:20,000 and 1:150,000 by the Hydrographic Service⁶.

Gazetteers

19. Kadaster maintains a digital data file holding all geographical names occurring in the topographic map series at 1:25,000 (TOP25namen) and 1:50,000 (TOP50namen) as well as the 1:250,000 road map (TOP250namen). It includes data about the objects the names refer to and their location, and is available as open data. TOP25namen, last updated in 2013, can be provided in Esri file geodatabase and Dbase format, TOP50namen and TOP250namen are available as MS Excel files: see www.kadaster.nl/-/topnamen.

Digital data

20. Feature-based vector data in GML of the Basisregistratic Topografie (BRT, Key Register for Topography), at scales between 1:10,000 (TOP10NL) and 1:1,000,000 (TOP1000NL), and raster data files in GEO-TIFF at scales between 1:25,000 (TOP25raster) and 1:1,000,000 (TOP1000raster) are updated in a one-year cycle for all topography of the Netherlands. They are renewed synchronically for all scales and published 5 times a year by the Geo-Information department Kadaster. Files can be obtained as open data through the governmental PDOK geo data portal: www.pdok.nl/en.

and on the 1:50000 maps:

Lijst van geografische namen voorkomend op de topografische kaart 1:50 000. Emmen,1988.

The most extensive overview of topographic names are the indexes of the topographic atlases composed of the 1:25.000 maps of Kadaster:

Grote Provincie Atlas 1:25 000, Wolters-Noordhoff, Groningen (11 volumes), 1987-1991. Topografische Atlas 1:25.000, Uitgeverij 12 Provinciën, Landsmeer (12 volumes), 2012-2017

D. Glossary of appellatives, adjectives and other words necessary for the understanding of maps

Dutch language words

20.(based on glossaries on the pre 1980 and post 1980 editions of the military topographic maps 1:50 000, and appellatives/designations of the post 1980 1:25 000 series)

Aardgasstation natural gas pumping station

Aardgaswinning natural gas field Automobielfabriek motor car factory

Baan way, road Beek brook

Bejaardencentrum old people's home

Berg hill
Bootdienst ferry to....
Brouwerij brewery
Chemische fabriek chemical works

Conservenfabriek cannery
Eendenkooi duck decoy
Elektriciteitscentrale power station
Fabriek factory
Gasbedrijf gas works
Gemaal pumping-station

Gevangenis prison

Goederenspoorweg freight train track Golfbaan golf course Graansilo (grain) elevator

Hangar hangar

. 8

Haven harbour
Heide heath
Helihaven heliport
Helling slipway
Hoeve farm

Hoogovens en Staalfabrieken blast-furnace and steel-works

Hoogspanningsleiding power line Houtzagerij saw-mill

Hulpsecretarie town clerk's branch office In aanleg under construction

Industrieterrein industrial area
Jachthaven marina
Jeugdherberg youth hostel
Kabelfabriek cable-works
Kalkovens lime-kiln
Kanaal canal
Kapel chapel

Kindertehuis children's home Klooster monastery

Koelhuis cold storage building

Kunstijsbaan skating rink
Laan avenue
Loop watercourse
Machinefabriek engineering-works

Meer lake

Metro underground station Meubelfabriek furniture factory

Molen mill (windmill, watermill)

Natuurreservaat nature reserve Olieraffinaderij oil refinery Papierfabriek paper-mill Peil water level Plas lake

Pompstation pumping-station

Pontveer ferry

Recreatiegebied recreation-area
Recreatieoord recreation-site
Reddingsboot life boat
Remise tramway depot
Renbaan racecourse
Reservaat nature reserve

Ruïne ruins Schouwburg theater Slikken mud-flats Sodafabriek soda-works Sportterrein sports park Sportvelden sports field Spuisluis sluice Stadion stadium Steenfabriek brick-works Suikerfabriek sugar-mill Straat street Stuw weir Toren tower

Uitzichttoren observation-tower

Vaart canal Veen peat Veerhuis ferry-house Verpleeghuis nursing-home Vliegveld aerodrome Vloeivelden sewage-farm Voorm. Fort former fortification Vuilverbrandingsinstallatie refuse incinerator Waterleidingbedrijf waterworks Watertoren water-tower Weg street Werf shipyard Wetering watercourse Winkelcentrum shopping-centre Winterpeil winter level Woonwagencentrum caravan-camp IJsbaan skating rink **IJsstadion** skating stadium Ziekenhuis hospital Zomerpeil summer level Zuivelfabriek dairy factory Zuiveringsinstallatie purification plant Zweefvliegtuigen glider air field Zwembad swimming pool

E. Abbreviations used in the official topographic maps of the Netherlands

21.(based on lists on pre 1980 and post 1980 military editions of topographic maps 1:50 000)

Br brug bridge

Bask brbaskuulbrugbascule bridgeBegr plbegraafplaatscemeteryDr brdraaibrugswing-bridgeFabrfabriekfactory

Gd grondduiker culvert, siphon Gem gemeente municipality

Gem huis gemeentehuis town hall, municipality hall

Gp grenspaal boundary post Hp hoekpunt-paal triangulation point

InrinrichtinginstitutionKmkorenmolencorn millOph brophaalbrugdraw bridgePParkeerplaatsParking sitePKProtestantse kerkProtestant church

Pl paal pole

RD Rijksdriehoeksmeting state survey

RK Rooms-katholieke kerk Roman Catholic church

Sch sl schutsluis lock Trafo Transformator transformer Statn station station Vbr footbridge voetbrug Wm watermolen water-mill Wt watertoren water-tower Note: Designations and abbreviations are indicated in a different type face on the Netherlands topographic map series at the scale of 1:25,000 and 1:50,000.

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¹ These guidelines apply to the European part of the Kingdom of the Netherlands.

² Chart Specifications of the I.H.O., section 500 – Geographic Names: Lettering, Numerals. International Hydrographic Bureau, Monaco.

³ For sections 9-14 the help of Dr K.F.Gildemacher and Prof.dr A.P.Versloot is gratefully acknowledged.

⁴ Nammejouwingskommisje, Fryske Akademy, Doelestrjitte 8, 8911 DX Ljouwert.

⁵ Kadaster, P.O. Box 9046, 7300 GH Apeldoorn.

⁶ Hydrografische Dienst. P.O. Box 90704, 2509 LS Den Haag.