The Dutch ‘Gateway to Europe’ spatial policy narrative, 1980–2020: a systematic review

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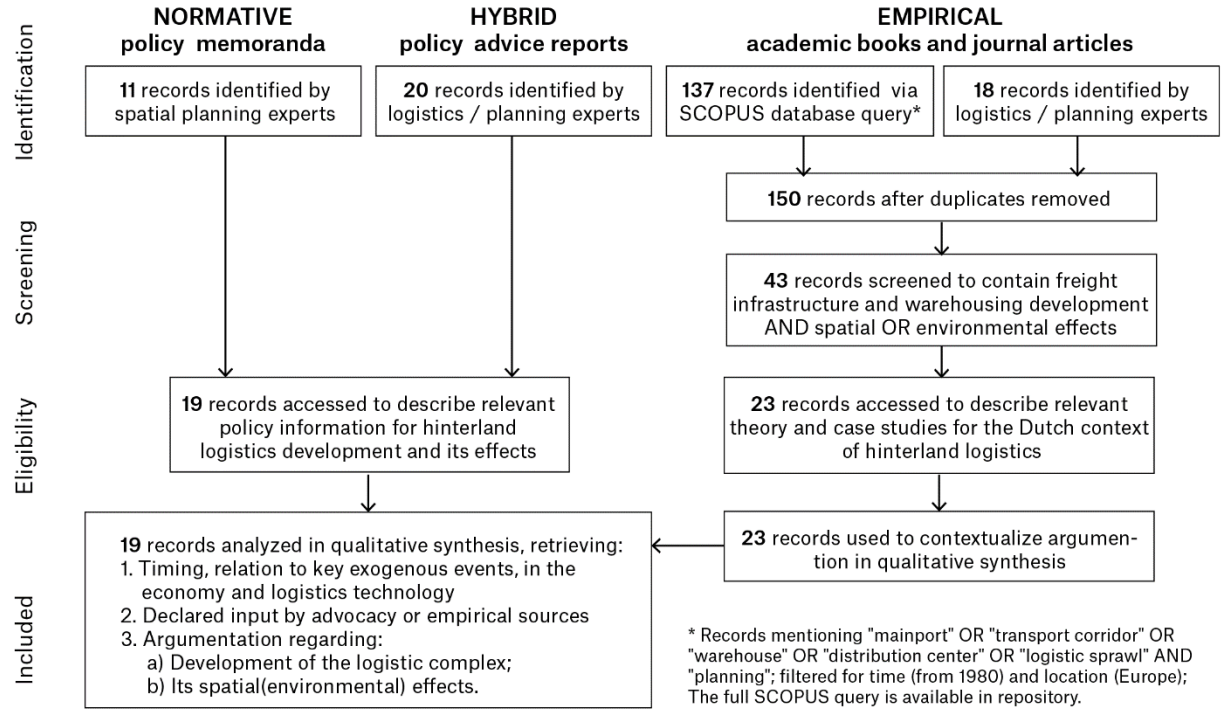
Systematic review process documentation

1. Flowchart of systematic review (PRISMA model, 2009), adapted by the author for the purpose of selecting and comparing normative, empirical and hybrid records
2. List of screened and eligible documents
3. Checklist (PRISMA model, 2009)

1. Flowchart



SCOPUS query

Records are selected mentioning "mainport" OR "transport corridor" OR "warehouse" OR "distribution center" OR "logistic sprawl" AND "planning"; filtered for time (from 1980) and location (Europe); filtered on papers, articles and books; filtered on relevant titles (areas of spatial planning, transport/economic geography and environment); filtered on English or Dutch language; excluding publications with clearly off-topic keywords.

See full query in the accompanying Txt file.

2. List of screened and eligible documents

Normative

title	nr	screening	eligibility
BZK. (2020). Nationale omgevingsvisie - NOVI [National Strategy on Spatial Planning and the Environment]. The Hague: Ministry of the Interior and Kingdom Relations.	1		
BZK. (2019). Draft National Strategy on Spatial Planning and the Environment. Retrieved from Ministry of the Interior and Kingdom Relations website: https://www.denationaleomgevingsvisie.nl/publicaties/english+versions/default.aspx [English draft version, used and annotated during the writing process, later substituted by the Dutch and final version of 2020]	1a		
I&M. (2012). Structuurvisie Infrastructuur en Ruimte [Structural Vision Infrastructure and Space]. Retrieved from Ministry of Infrastructure and the Environment website: http://www.rijksoverheid.nl/onderwerpen/ruimtelijke-ordening-en-gebiedsontwikkeling/documenten-en-publicaties/rapporten/2012/03/13/structuurvisie-infrastructuur-en-ruimte.html	2		
VROM. (2008). Zicht op mooi Nederland - structuurvisie voor de snelwegomgeving [The Beauty of the Netherlands in Sight]. The Hague: Ministry of Spatial Planning.	3		
VROM. (1991). Vierde Nota over de Ruimtelijke Ordening Extra [Fourth Memorandum of Spatial Planning Extra]. The Hague: SDU Publishers.	4		
VROM. (2004). Nota Ruimte - ruimte voor ontwikkeling [Space for Development]. Den Haag: Ministry of Spatial Planning.	5		
VROM. (1988). Vierde Nota Ruimtelijke Ordening [Fourth Memorandum of Spatial Planning]. The Hague: Ministry of Spatial Planning.	6		
I&W, & EZK. (2016). A circular economy in the Netherlands by 2050. Retrieved from Ministry of Infrastructure and the Environment & Ministry of Economic Affairs website: https://www.government.nl/documents/leaflets/2016/09/22/a-circular-economy-in-the-netherlands-by-2050	7		
EZK. (2019). Missies voor het topsectoren- en innovatiebeleid [Missions for the topsectors and innovation policy]. The Hague: Ministry of Economic Affairs and Climate Policy.	8		
I&M. (2017). MIRT onderzoek goederenvervoercorridors Oost en Zuidoost - The Dutch Logistics Corridors. The Hague: Ministry of Infrastructure and the Environment.	9		
I&M and Dutch regions. (2017). Ruimtelijk-Economische Ontwikkelstrategie [Spatial-Economic Development Strategy]. The Hague.	10		
VNO-NCW, FNV, VCP, Natuur & Milieu, VNG, IPO, … Affairs, D. M. of E. (2017). National agreement on the circular economy. Retrieved from www.government.nl/circular-economy	11		

Hybrid

title	nr	screening	eligibility
CRa. (2019). (X)XL-verdozing [(X)XL Boxification] (Board of government advisors, ed.). The Hague: CRa.	1		
Kuipers, B., Van der Lugt, L., Jacobs, W., Streng, M., Jansen, M., & Van Haaren, J. (2018). Rotterdam effect - de impact van mainport Rotterdam op de Nederlandse economie [the impact of mainport Rotterdam on the Dutch economy]. Retrieved from https://www.eur.nl/upt/	2		
NEI. (1983). Nederland als “Stapelplaats” - onderzoek naar de internationale handels- en transportfunctie [Netherlands as Staple Port - study on the international trade and transport function]. In A. M. Bakker (Ed.), Olijfreeks ; 1983-2 TA - TT. Rijswijk: Stichting Het Nederlands Economisch Instituut & Economisch Bureau voor het Weg- en Watervervoer.	3		
Panteia, AT Osborne, Defacto, & Topcorridors. (2019). Goederenvervoer- corridors Oost en Zuidoost [Freight corridors East and Southeast]. The Hague.	4		
RARO. (1986). Hoofdlijnen uit de discussie over de Notitie ruimtelijke perspectieven [Main discussion points on the Memo Spatial Perspectives]. The Hague.	5		

BCI, & EIB. (2019). Ruimte voor economische activiteit tot 2030 [Space for economic activity until 2030]. Amsterdam, Nijmegen.	6		
Rli. (2016). Mainports Voorbij [Beyond Mainports]. https://doi.org/978-90-77323-37-3	7		
RPB. (2005). Winkelen in megaland [Shopping in Megaland]. https://doi.org/Evers2005	8		
RPB. (2006). Bloeiende bermen: Verstedelijking langs autosnelwegen [Flourishing Verges: urbanization along the highways] (D. Hamers & K. Nabielek, eds.). The Hague: Nai010.	9		
RPD. (1986). Ruimtelijke verkenningen hoofdinfrastructuur [Spatial Explorations Main Infrastructure]. In Studierapporten RPD. The Hague: Distributiecentrum Overheidspublikaties.	10		
RPD. (1986). Notitie Ruimtelijke Perspectieven [Memo Spatial Perspectives]. The Hague.	11		
Stec Group. (2020). Ruimtelijke sturing op knooppunten [Spatial Steering on Logistic Hubs]. Arnhem.	12		
V&W. (2010). Mainport Holland - voor onze toekomst bekeken door 4 vensters [reviewed for our future through 4 lenses] (E. Euwe, ed.). The Hague: V&W.	13		
BCI. (2019). De kracht van Regionale Logistieke Ecosystemen in Nederland. Nijmegen.	14		
WRR. (2020). Het betere werk. The Hague.	15		
Logistieke Alliantie. (2019). Visie Handel en Logistiek in 2040 - een aanbod voor Nederland.	16		
RPD. (1966). Zeehaven Nota. The Hague: Rijksplanologische Dienst.	17		
Sijmons, D. (2018). Ruimte in het Klimaatakkoord. The Hague.	18		
Royal HaskoningDHV. (2019). Summary SEA NOVI.	19		
Fransen, R., Haarich, S., Holstein, F., Lebesque, L., & Zwicky, A. (2017). Studies betreffende het Interreg-project EUREGIO Güterkorridor / EUREGIO Goederencorridor Definitieve versie van het eindverslag.	20		

Empirical

title	nr	screening	eligibility
Aljohani, K., & Thompson, R. G. (2016). Impacts of logistics sprawl on the urban environment and logistics: Taxonomy and review of literature. Journal of Transport Geography, 57, 255–263. https://doi.org/10.1016/j.jtrangeo.2016.08.009	1		
Browne, M., Allen, J., Nemoto, T., Patier, D., & Visser, J. (2012). Reducing Social and Environmental Impacts of Urban Freight Transport: A Review of Some Major Cities. Procedia - Social and Behavioral Sciences, 39, 19–33. https://doi.org/10.1016/j.sbspro.2012.03.088	2		
Flämig, H., & Hesse, M. (2011). Placing dryports. Port regionalization as a planning challenge - The case of Hamburg, Germany, and the Süderelbe. Research in Transportation Economics, 33(1), 42–50. https://doi.org/10.1016/j.retrec.2011.08.005	3		
Geerlings, H., Kuipers, B., & Zuidwijk, R. (2018). Port and Networks - strategies, operations and perspectives. Rotterdam: Routledge.	4		
Gibbs, A. (1987). Retail innovation and planning. Progress in Planning, 27(PART 1), 3–67. https://doi.org/10.1016/0305-9006(87)90009-2	5		
Guy, C., & Bennison, D. (2007). Planning guidance and large-store development in the United Kingdom: The search for “flexibility.” Environment and Planning A, 39(4), 945–964. https://doi.org/10.1068/a38124	6		
Heitz, A., Dablanc, L., & Tavasszy, L. A. (2017). Logistics sprawl in monocentric and polycentric metropolitan areas: the cases of Paris, France, and the Randstad, the Netherlands. Region, 4(1), 93–107. https://doi.org/10.18335/region.v4i1.158	7		
Hesse, M. (2004). Land for logistics: Locational dynamics, real estate markets and political regulation of regional distribution. Tijdschrift Voor Economische En Sociale Geografie, 95(2), 162–173. https://doi.org/10.1111/j.0040-747X.2004.t01-1-00298.x	8		
Hesse, M., & Rodrigue, J. P. (2004). The transport geography of logistics and freight distribution. Journal of Transport Geography, 12(3), 171–184. https://doi.org/10.1016/j.jtrangeo.2003.12.004	9		
Leinbach, T. R., & Capineri, C. (2007). Globalized freight transport : intermodality, e-commerce, logistics and sustainability. Cheltenham: Edward Elgar.	10		

Onstein, A. T. C., Tavasszy, L. A., & van Damme, D. A. (2019). Factors determining distribution structure decisions in logistics: a literature review and research agenda. Transport Reviews, 39(2), 243–260. https://doi.org/10.1080/01441647.2018.1459929	11		
Pinchasik, D. R., Hovi, I. B., Wangsness, P. B., & Tennøy, A. (2019). Environmental and transport effects of warehouse relocationing: evidence from Norway. Transportation Planning and Technology, 42(1), 37–55. https://doi.org/10.1080/03081060.2018.1541281	12		
Raimbault, N. (2019). From regional planning to port regionalization and urban logistics. The inland port and the governance of logistics development in the Paris region. Journal of Transport Geography, 78(January), 205–213. https://doi.org/10.1016/j.jtrangeo.2019.06.005	13		
Raimbault, N., Andriankaja, D., & Paffoni, E. (2012). Understanding the Diversity of Logistics Facilities in the Paris Region. Procedia - Social and Behavioral Sciences, 39, 543–555. https://doi.org/10.1016/j.sbspro.2012.03.129	14		
van Buren, N., Demmers, M., van der Heijden, R., & Witlox, F. (2016). Towards a circular economy: The role of Dutch logistics industries and governments. Sustainability (Switzerland), 8(7), 1–17. https://doi.org/10.3390/su8070647	15		
Van den Heuvel, F. P., de Langen, P. W., van Donselaar, K. H., & Fransoo, J. C. (2013). Spatial concentration and location dynamics in logistics: The case of a Dutch province. Journal of Transport Geography, 28, 39–48. https://doi.org/10.1016/j.jtrangeo.2012.10.001	16		
van Klink, H. A. (1994). Strategic partnering among logistic nodes: Rotterdam and Eastern Europe. Journal of Transport Geography, 2(3), 169–177. https://doi.org/10.1016/0966-6923(94)90002-7	17		
Wagner, T. (2010). Regional traffic impacts of logistics-related land use. Transport Policy, 17(4), 224–229. https://doi.org/10.1016/j.tranpol.2010.01.012	18		
Witte, P., Wiegmans, B., Braun, C., & Spit, T. (2016). Weakest link or strongest node? Comparing governance strategies for inland ports in transnational European corridors. Research in Transportation Business and Management, 19, 97–105. https://doi.org/10.1016/j.rtbm.2016.03.003	19		
Boelens, L. (2011). Going beyond planners' dependencies: An actor-relational approach to Mainport Rotterdam. Town Planning Review, 82(5), 547–572. https://doi.org/10.3828/tpr.2011.32	20		
Duinen, L. Van. (2013). Mainport and corridor : exploring the mobilizing capacities of Dutch spatial concepts. Planning Theory & Practice, 14(2), 211–232. https://doi.org/10.1080/14649357.2013.782423	21		
Hesse, M. (2020). Logistics: Situating flows in a spatial context. Geography Compass, 14(7), 1–15. https://doi.org/10.1111/gec3.12492	22		
Raimbault, N. (2021). Outer-suburban politics and the financialisation of the logistics real estate industry: The emergence of financialised coalitions in the Paris region. Urban Studies, February 2020, 004209802110144. https://doi.org/10.1177/00420980211014452	23		
A., J. A. A. (2005). Principles of measurement the impact of the Trans-European transport networks' expansion on regional economic growth.	24		
Arvidsson, N. (2013). The milk run revisited: A load factor paradox with economic and environmental implications for urban freight transport. Transportation Research Part A: Policy and Practice, 51, 56–62. https://doi.org/10.1016/j.tra.2013.04.001	25		
Scholl, B. B. (2016). Spatial Planning and Development in a European and Macro-regional Context. Contributions to Economics, 207, 11–47.	26		
Combes, F. F. (2019). Equilibrium and Optimal Location of Warehouses in Urban Areas: A Theoretical Analysis with Implications for Urban Logistics. Transportation Research Record, 2673(5), 262–271.	27		
Heitz, A., Dablanc, L., Olsson, J., Sanchez-Diaz, I., & Woxenius, J. (2020). Spatial patterns of logistics facilities in gothenburg, sweden. Journal of Transport Geography, 88. https://doi.org/10.1016/j.jtrangeo.2018.03.005	28		
Heitz, A., Launay, P., & Beziat, A. (2019). Heterogeneity of logistics facilities: an issue for a better understanding and planning of the location of logistics facilities. European Transport Research Review, 11(1). https://doi.org/10.1186/s12544-018-0341-5	29		
Maksin, M., Nenković-Riznić, M., Milijić, S., & Ristić, V. (2017). The impacts of spatial planning on the sustainable territorial development of the Rhine-Danube Trans-European	30		

Transport Corridor through Serbia. European Planning Studies, 25(2), 278–297. https://doi.org/10.1080/09654313.2016.1260691			
Marshall, T. (2014). The European Union and Major Infrastructure Policies: The Reforms of the Trans-European Networks Programmes and the Implications for Spatial Planning. European Planning Studies, 22(7), 1484–1506. https://doi.org/10.1080/09654313.2013.791968	31		
Martin, R. (2008). Globalized Freight Transport: Intermodality, E-Commerce, Logistics and Sustainability: Thomas R. Leinbach and Cristina Capineri, eds. Cheltenham, U.K.: Edward Elgar, 2007. 287 pp., maps, diagrams, and index. $130.00 hardcover (ISBN-13: 9781845425029). The Professional Geographer, 60(4), 586–588. https://doi.org/10.1080/00330120802239936	32		
Jones, P. P. (1984). Retail warehouse developments and planning policies in Scotland. Scottish Geographical Magazine, 100(1), 12–19.	33		
Palerm, J. (2006). The Habitats Directive as an instrument to achieve sustainability? An analysis through the case of the Rotterdam mainport development project. European Environment, 16(3), 127–138. https://doi.org/10.1002/eet.413	34		
Priemus, H. (2018). How housing, infrastructure and water determined the spatial structure of the Randstad. European Planning Studies, 26(3), 546–570. https://doi.org/10.1080/09654313.2017.1402867	35		
Harder Frank, R. (1999). MPOs and railroad intermodal terminals: Successful development strategies. Transportation Quarterly, 53(2), 31–44.	36		
Tchang, G. (2016). The impact of highway proximity on distribution centres' rents. Urban Studies, 53(13), 2834–2848. https://doi.org/10.1177/0042098015596930	37		
Van den Berghe, K., Jacobs, W., & Boelens, L. (2018). The relational geometry of the port-city interface: Case studies of Amsterdam, the Netherlands, and Ghent, Belgium. Journal of Transport Geography, 70(May), 55–63. https://doi.org/10.1016/j.jtrangeo.2018.05.013	38		
Wiegmans, B., Witte, P., & Spit, T. (2015). Characteristics of European inland ports: A statistical analysis of inland waterway port development in Dutch municipalities. Transportation Research Part A: Policy and Practice, 78, 566–577. https://doi.org/10.1016/j.tra.2015.07.004	39		
Wišniewski, S. (2015). Significance of Trans-European Transport Networks for Logistics Centre Localization as Exemplified by the Łódź Region. European Spatial Research and Policy, 22(1), 23–44. https://doi.org/10.1515/esrp-2015-0015	40		
Witte, P., Wiegmans, B., & Rodrigue, J. P. (2017). Competition or complementarity in Dutch inland port development: A case of overproximity? Journal of Transport Geography, 60, 80–88. https://doi.org/10.1016/j.jtrangeo.2017.02.008	41		
Sandström Ulf G, & Elander, I. (2021). Biodiversity, road transport and urban planning: a swedish local authority facing the challenge of establishing a logistics hub adjacent to a natura 2000 site. Progress in Planning, 148. https://doi.org/10.1016/j.progress.2019.100463	42		
Yuan, Q. (2019). Planning Matters: Institutional Perspectives on Warehousing Development and Mitigating Its Negative Impacts. Journal of the American Planning Association, 85(4), 525–543. https://doi.org/10.1080/01944363.2019.1645614	43		

PRISMA 2009 Checklist

Section/topic	#	Checklist item	Reported on page #
TITLE			
Title	1	Identify the report as a systematic review, meta-analysis, or both.	1
ABSTRACT			
Structured summary	2	Provide a structured summary including, as applicable: background; objectives; data sources; study eligibility criteria, participants, and interventions; study appraisal and synthesis methods; results; limitations; conclusions and implications of key findings; systematic review registration number.	1 (no reg.)
INTRODUCTION			
Rationale	3	Describe the rationale for the review in the context of what is already known.	3-5
Objectives	4	Provide an explicit statement of questions being addressed with reference to participants, interventions, comparisons, outcomes, and study design (PICOS).	5,6
METHODS			
Protocol and registration	5	Indicate if a review protocol exists, if and where it can be accessed (e.g., Web address), and, if available, provide registration information including registration number.	NA
Eligibility criteria	6	Specify study characteristics (e.g., PICOS, length of follow-up) and report characteristics (e.g., years considered, language, publication status) used as criteria for eligibility, giving rationale.	5
Information sources	7	Describe all information sources (e.g., databases with dates of coverage, contact with study authors to identify additional studies) in the search and date last searched.	Repo.
Search	8	Present full electronic search strategy for at least one database, including any limits used, such that it could be repeated.	Repo.
Study selection	9	State the process for selecting studies (i.e., screening, eligibility, included in systematic review, and, if applicable, included in the meta-analysis).	5,6
Data collection process	10	Describe method of data extraction from reports (e.g., piloted forms, independently, in duplicate) and any processes for obtaining and confirming data from investigators.	5,6
Data items	11	List and define all variables for which data were sought (e.g., PICOS, funding sources) and any assumptions and simplifications made.	6
Risk of bias in individual studies	12	Describe methods used for assessing risk of bias of individual studies (including specification of whether this was done at the study or outcome level), and how this information is to be used in any data synthesis.	6
Summary measures	13	State the principal summary measures (e.g., risk ratio, difference in means).	NA
Synthesis of results	14	Describe the methods of handling data and combining results of studies, if done, including measures of consistency (e.g., I^2) for each meta-analysis.	6

PRISMA 2009 Checklist

Section/topic	#	Checklist item	Reported on page #
Risk of bias across studies	15	Specify any assessment of risk of bias that may affect the cumulative evidence (e.g., publication bias, selective reporting within studies).	6
Additional analyses	16	Describe methods of additional analyses (e.g., sensitivity or subgroup analyses, meta-regression), if done, indicating which were pre-specified.	6
RESULTS			
Study selection	17	Give numbers of studies screened, assessed for eligibility, and included in the review, with reasons for exclusions at each stage, ideally with a flow diagram.	6
Study characteristics	18	For each study, present characteristics for which data were extracted (e.g., study size, PICOS, follow-up period) and provide the citations.	NA
Risk of bias within studies	19	Present data on risk of bias of each study and, if available, any outcome level assessment (see item 12).	NA
Results of individual studies	20	For all outcomes considered (benefits or harms), present, for each study: (a) simple summary data for each intervention group (b) effect estimates and confidence intervals, ideally with a forest plot.	NA
Synthesis of results	21	Present results of each meta-analysis done, including confidence intervals and measures of consistency.	NA
Risk of bias across studies	22	Present results of any assessment of risk of bias across studies (see Item 15).	NA
Additional analysis	23	Give results of additional analyses, if done (e.g., sensitivity or subgroup analyses, meta-regression [see Item 16]).	6>
DISCUSSION			
Summary of evidence	24	Summarize the main findings including the strength of evidence for each main outcome; consider their relevance to key groups (e.g., healthcare providers, users, and policy makers).	13-16
Limitations	25	Discuss limitations at study and outcome level (e.g., risk of bias), and at review-level (e.g., incomplete retrieval of identified research, reporting bias).	13-16
Conclusions	26	Provide a general interpretation of the results in the context of other evidence, and implications for future research.	13-15
FUNDING			
Funding	27	Describe sources of funding for the systematic review and other support (e.g., supply of data); role of funders for the systematic review.	16

From: Moher D, Liberati A, Tetzlaff J, Altman DG, The PRISMA Group (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. PLoS Med 6(7): e1000097. doi:10.1371/journal.pmed1000097

For more information, visit: **www.prisma-statement.org**.