Costing Conflict

An early warning method to assess the impact of political violence on vital security interests

Clingendael Report

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November 2021

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Introduction

Early Warning and Early Action (EWEA) processes seek to identify the risk of conflict, instability and violence. A large number of foresight models can predict which countries and areas may experience what *type* and *what levels* of violence. From this, they produce lists of countries and regions at risk which then qualify for policy measures to help improve stability.

However, in order to prioritise countries and regions it is equally important to assess the implications (or the cost) of conflict. For example, Early Warning by the OSCE High Commissioner on National Minorities (HCNM) seeks to "prevent tensions from escalating into conflict" and focus on all forms of tension accordingly. UNDP Early Warning seeks to understand how conflict impacts development initiatives and will prioritize countries with those problems. Mandates and interests thus determine priorities.

What interests are at stake is however often assumed rather than explicitly considered. This report addresses this by building a methodology to assess interests, specifically the *security* interests of *governments*. The goal is to understand how the outbreak and intensification of conflict affect (security) interests. The method is built upon the notion that effectively designed EWEA processes need these impact assessments as much as conflict risk assessment.

Developing an impact assessment method is complicated for two reasons. First, methods need to be tailor-made for specific (country) interest.[1] After all, instability in Libya will have different effects for France, Italy or Egypt. This requires explicit definitions of vital interests and a detailed specification of how potential instability might affect them. Second, impact assessment methods are often unavailable or are so specialised (e.g. only within the intelligence community) that there is very little fruitful exchange on how best to devise impact methods.[2]

1 In security studies this is called the specification of a 'referent object'. See Barry Buzan, Ole Waever and Jaap De Wilde, *Security: A new framework for analysis* (Boulder: Lynne Rienner Publishers, Inc., 1998).

2 Consequently, there are few European examples of how such impact assessments can be conducted. For an overview see: "Good Practices," OECD Toolkit for Risk Governance; European Union Agency for Network and Information Security (ENISA), *National-level Risk Assessments: An Analysis Report* (Heraklion: ENISA, November 2013); "National Security Threat List," National Oceanic and Atmospheric Administration Western Regional Center, last updated November 28, 2001.

This report aims to tackle both problems. It provides a methodology for the Netherlands and proposes a quantitative approach that focusses on so-called 'transmission belts': patterns through which instability abroad manifest themselves in the Netherlands.

Fortunately, there is a tradition to build on as the government of the Netherlands has some open-source impact assessments. There is an assessment framework by the National Network of Safety and Security Analysts (Analistennetwerk Nationale Veiligheid (ANV)) that explores how a very wide array of potential security threats (e.g. rising sea levels, pandemics, social tensions) might harm the vital interests of the Netherlands. Furthermore, both the Clingendael Institute and the Hague Centre for Strategic Studies have nascent impact assessment frameworks.

These frameworks exist because the Dutch government has an interest in strategic foresight. For example, in 2018 the government of the Netherlands prioritised conflict prevention as the first goal of its Integrated International Security Strategy. Since the adoption of this strategy, the Ministries of Foreign Affairs (MFA) and Defence (MOD) have invested in enhancing their ability for EWEA.

Yet, existing methods which assess impact need improvement. For example, how can one account for the interests of one's allies? Do we distinguish between the effects of intra-state and inter-state conflict on Dutch security interests? Which transmission belts actually exist? What kind of method can be used?

This report tackles these questions and proposes a methodology for impact assessment. The proposal is deliberately open source and relies heavily on methodology as it seeks to justify choices and sponsor dialogue. The hope is that an explicit and open discussion of choices will allow the Dutch government and the ecosystems of actors working on EWEA in the Netherlands to criticise and improve impact assessments. This report therefore aims to inform further discussions on the effectiveness of various impact assessment methods.

The report has the following composition. The first chapter reviews the existing Dutch impact assessment frameworks (ANV, Clingendael and HCSS) and arrives at a set of conditions with which EWEA impact assessments should comply. The second chapter develops an impact assessment method which is specifically tailored to Dutch EWEA efforts by tackling various limitations of the three previously analysed assessment frameworks (e.g. being too nationally focused). The third chapter presents and discusses specific indicators to measure impacts. The final section concludes and provides a guideline on how to interpret the results.

1 EWEA impact frameworks in the Netherlands

In the Netherlands, there are three frameworks to assess the impact of violence on Dutch interests.

One is a very detailed methodology by the *Analistennetwerk Nationale Veiligheid* (ANV). The ANV is a body to assess the effects of man-made and non-man-made disasters for Dutch Security. The ANV uses a detailed methodology on which basis experts can develop and score certain scenarios. These scenarios not only assess the impact of conflict and violence on the Netherlands but also a range of other security threats (e.g. climate change, digitalisation etc.).

Two other impact assessments have been developed by two Dutch think thanks. The Clingendael Institute builds on the ANV with a qualitative 'codebook' that has been developed to assess the security effects of international developments. The Hague Centre for Strategic Studies (HCSS) has developed a quantitative methodology that is specific to EWEA, as it explores how the outbreak and continuation of intra-state conflict might impact Dutch security interests. This chapter reviews each of these frameworks and presents their strengths and weaknesses.

1.1 Vital interests and the need to remain flexible

All three methods are based on six vital interests as defined in Dutch security strategy documents.

These vital interests are defined as goals that ensure that the Netherlands remains secure: territorial security; physical security; economic security; ecological security; social-political stability; and international law and order. The first five security interests stem from the 2007 National Security Strategy whereas the sixth was added in 2019 in the context of a new National Security Strategy.[3]

3 NCTV, *Nationale Veiligheid Strategie 2019* (The Hague: Rijksoverheid, 2019) and https://zoek.officielebekendmakingen.nl/kst-30821-3-b1.pdf. The 2007 set of security interests was proposed by the CCSS (Clingendael Centre for Strategic Studies) in 2004, see Rob De Wijk et al., "Nationale Veiligheid. Aanzet Voor Een Departementale Beleidsverkenning," (Clingendael Centre for Strategic Studies, 2004).

Vital interests are not set in stone, however.[4] The content, definition and number of vital interests have changed over time. Such changes to these (vital, or as some would label them, 'national') interests are reflective of a changing perception of what security is and means for the Netherlands. For example, up until the First World War, economic interests were not perceived to be a vital security interest. Another reason why vital interests change is that the (geopolitical) context changes. As a result of increased globalisation, the Netherlands has become more dependent on strategic goods such as medicines, natural resources and trade routes. Moreover, increased geopolitical competition means that the ability to obtain these goods has become more difficult. The effect has been that also vital interests have expanded over time.

Until 2004 there were four vital interests that underpinned Dutch security policy.[5] These four interests had guided Dutch policy for nearly 80 years in various incarnations up until the First World War. Before the First World War, economic interests did not form part of the assessment and the Netherlands only had three vital interests: internal security, external security and public safety (in Dutch: inwendige veiligheid, uitwendige veiligheid en openbare veiligheid). Economic interests were added as the First World War laid bare the interdependence of the Netherlands on the world economy.[6] Before 1887 all safety issues – like pandemics and floods – were considered to be matters of public safety ('openbare veiligheid') and were not considered to be vital security interests which were limited to internal and external security.[7]

1.2 ANV impact methodology

Out of the three methodologies, the ANV methodology is the most developed. Established in 2007, the ANV has developed a set of sub-interests for each vital interest (see table 1) and has operationalised each of these sub-interests in detail.

4 See Kars de Bruijne, "Vitale Belangen," Policy Brief (The Hague: The Clingendael Institute, August 2018).

5 Being: Nationale rechtsorde, Internationale rechtsorde, Openbare veiligheid, Economische veiligheid. "Beleidsplan Crisisbeheersing 2004-2007," (The Hague, 2004); NCTV, *Nationaal Handboek Crisisbesluitvorming 1997*, (The Hague, 1997).

6 See Kars de Bruijne, "Vitale Belangen," Policy Brief (The Hague: The Clingendael Institute, August 2018).

7 E.T. Brainich von Brainich Felth, "Het Systeem van Crisisbeheersing: Bevoegdheden en Verplichtingen bij de Voorbereiding op en het Optreden Tijdens Crises," (The Hague: Boom Juridische Uitgevers, 2004).

Table 1 ANV impact criteria[8]

National security interest	Impact criteria
1. Territorial security	1.1 Encroachment on Dutch territory
	1.2 Infringement of the international position of the Netherlands
	1.3 Infringement of digital infrastructure integrity
	1.4 Encroachment on allied territory
2. Physical safety	2.1 Fatalities
	2.2 Seriously injured and chronically ill
	2.3 A lack of basic needs (physical suffering)
3. Economic security	3.1 Costs
	3.2 Violation of the vitality of the Dutch economy
4. Ecological security	4.1 Long-term violation of the natural environment
5. Social and political stability	5.1 Disruption of daily life
	5.2 Violation of the democratic constitutional system
	5.3 Societal impact
6. International legal order	6.1 Violation of state sovereignty, peaceful coexistence & peaceful conflict resolution (as codified in the UN charter)
	6.2 Violation of the functioning and legitimacy of or adherence to international treaties and norms concerning human rights
	6.3 Violation of a rule-based international financial-economic system
	6.4 Violation of the effectiveness and legitimacy of multilateral institutions and international regimes

To assess the impact of (international) developments on Dutch security interests, the ANV relies on certain scenarios. For example, in order to assess the impact of terrorism on the Netherlands, the methodology proposes a representative scenario of a specific type of 'terrorist attack'.

A diverse group of experts subsequently use the very detailed set of indicators for each sub-interest to assess their impact by means of a structured process. For example, according to specific categories like the number of deaths, the number of persons injured, the material damage and the costs.[9]

These impact scores are standardised and made comparable between categories and thus allow threats to be compared vis-à-vis one another. The method has been

8 The National Network of Safety and Security Analysts, "National Risk Assessment," 2019, p. 19.

9 Analistennetwerk Nationale Veiligheid, *Leidraad risicobeoordeling: Geïntegreerde risicoanalyse Nationale Veiligheid* (Mei 2019).

applauded in some of the literature (e.g. by the OECD) as one of the most developed impact assessment methodologies in Europe.[10]

For the purpose of engaging in the calculation of the effects of conflict and violence on Dutch vital interests, the ANV methodology has three drawbacks. First, the fact that the methodology is well developed also makes it rigid. A narrow focus on the indicators does not allow for some real-life effects. For example, criterion 1.2 (international position of the Netherlands) is measured by variables such as local protests against Dutch proposals that can miss the real impact on the Dutch international position (e.g. as countries take a geopolitical swing). In other cases, however, the indicators have been so wide that they have resulted in nearly every development becoming a threat to Dutch interests. For example, indictors for criterion 6.2 are that any human rights violation constitutes a threat to vital Dutch interests. That choice is overburdening the concept of a vital interest.

A second problem in using the ANV methodology to inform an EWEA assessment is that the methodology is overly focused on 'internal' matters such as crises, public order and the environmental impact on Dutch territory. This 'internal' security focus is understandable considering that the ANV works first and foremost for the National Coordinator for Security and Counterterrorism (NCTV)– a department that focuses primarily on national security issues. For example, most assessments exclusively focus on the Netherlands (within Europe) rather than the Kingdom of the Netherlands (thus within Europe and its overseas territories). Moreover, the interests of (vital) allies are barely considered by the ANV. Likewise, the vitality of the world economy and the international ecological system are defined in purely Dutch terms.

For a proper EWEA assessment it is necessary to broaden this 'internal' security focus and include a more international outlook.[11] For example, a key issue is that the interests of (vital) allies should become part of the EWEA impact assessment (insofar as they are not). This is necessary as the geopolitical reality is that the Netherlands must be a cooperative partner in multilateral Peace Support Operations that serve the vital interests of key partners more than those of the Netherlands. Moreover, policymaking in response to threats is most often done in a multilateral context where there are task divisions between countries (e.g. in the Stability Leaders Forum (SLF), in NATO's AWACS and the EU's conflict Early Warning System (EWS)). Finally, under the EU and NATO treaties the Netherlands is required to assist its allies when they are under threat. For this reason, clear insights into the extent to which the territorial interests of key allies are threatened should be an integral part of Dutch EWEA assessments.

10 ENISA, *National-level Risk Assessments: an Analysis Report* (November 2013).

11 There are processes underway to broaden the scope which is too national. This report has used some of these discussions.

A third drawback of the ANV methodology is that it is very time- and resource-consuming. Each assessment, even the quick assessments, go through a set processes that involve fixed elements such as the process of selecting a scenario, selecting the right mix of experts, explaining the technical methodology to participants, the actual discussion and scoring, and the writing up thereof. On average this may take up to ten days per scenario per country. For an EWEA assessments where at least 15 countries have to be assessed, this means that impact assessments become too time-consuming.

1.3 Clingendael Institute impact codebook

In 2018, the Clingendael Institute developed a 'codebook' for impact assessments.[12] The codebook has been used for various types of horizon scanning projects such as the Strategic Monitor, the Clingendael Radar and specific processes in the ANV. The codebook is based on the ANV methodology but has significantly simplified the impact criteria by using just three levels of impact per criterion (rather than the large number of elements per sub-criterion): high, medium, and low impact and a description of the criteria needed for high, medium or low. In 2019, the codebook was adapted to include the newly added vital interest of 'internationale rechtsorde' ('international legal order'). In 2020, the codebook was adapted to fit EWEA processes; this involved an inclusion of various metrics to assess conflict outside of Europe and the Dutch allies.[13]

The benefit of the codebook is that it is less detailed and time-consuming than the ANV methodology. An impact assessment based on the Clingendael codebook requires a horizon scan of the literature, the identification of signals in excel, a coding of these signals on the basis of a codebook and a write up. As these are still detailed qualitative perspectives, they allow the researcher to go beyond broad assessments and engage in some depth with the country. The Clingendael method reduces the amount of time by a half compared to the ANV (and requires in principle just one researcher per case).

However, the codebook also comes with three drawbacks. First, as it does not rely on the ANV indicators per impact criterion, the codebook creates room for subjectivity. Although the scanning of signals ensures transparency, the actual scoring depends on the scanner's knowledge of the country, the ways in which the literature search has been conducted and the researcher's (subjective) understanding of the codebook.

12 Kars de Bruijne, "General Method: Global Security Pulse," (The Hague: The Clingendael Institute, May 2018); Kars de Bruijne, Minke Meijnders, Lauriane Héau, "Clingendael Radar Series," (The Hague: The Clingendael Institute, December 2017).

13 See Danny Pronk and Kimberley Kruijver, *Wijzer in de Toekomst: Beschouwing over de Early Warning/Early Action methodiek van de Rijksoverheid*, (The Hague: The Clingendael Institute, 2020), 8-9.

This could be resolved by having the data coded by another researcher to ensure inter-coder reliability, but this will inevitably be more time-consuming.

Second, the Clingendael codebook has a more international outlook than the ANV methodology by considering the effects on allies and other parts of the Kingdom. However, as the codebook still relies on the ANV criteria, the problem of the focus being too national is partly reproduced in the codebook as criteria such as 'the impact on the Netherlands' have remained defined in the same way as in the ANV. As a result, the actual scanning has left researchers with the feeling that some important elements of Dutch vital interests (like the impact on strategic dependency, the world economy or geopolitical tensions) could not be sufficiently scored and accounted for in the codebook.

Third, the Clingendael codebook requires manual assessment which makes it labour intensive. This means that there are limits as to how many cases can be processed at once (a maximum of 15 seems feasible) but also requires some degree of specialization on the part of researchers that may not always be available.

1.4 HCSS 'Relevance index'

In 2020, The Hague Centre for Strategic Studies (HCSS) developed a methodology for a quantitative impact assessment. The methodology was based on the six vital interests of the Netherlands in the context of a South-East Asia scan.

The HCSS approach is to measure a country's "current day ability to contribute to or take away from the Netherlands' national security".[14] Rather than threats it therefore uses the concept of 'relevance'. Relevance is understood both in a negative way (how a country can threaten the security interests of the Netherlands) and in a positive way (how it can support the security interests of the Netherlands). In the actual calculations positive relations outweigh negative relations, as negative relevance is included when it is 'highly' negative. The model also considers direct and indirect linkages.

Compared to the ANV methodology and the Clingendael codebook, the HCSS' 'relevance index' has clear advantages. It first and foremost allows for a much larger number of cases to be reviewed and is therefore better suited for the continuous scanning processes that need to underlie EWEA processes. Moreover, the approach is in principle less subjective because it is based on a reproducible set of indicators. This compels analysts to treat countries equally. Furthermore, the approach is scalable,

14 HCSS, "Method Assessment Framework to Classify and Rank States on their Relevance to Dutch National Security Interests Netherlands," 2020.

meaning that without too much extra effort the same model can be replicated from one region to the next. Additionally, the relevance index includes a nascent notion of 'transmission belts' as some of the observed linkages are patterns along which instability 'abroad' can manifest itself 'at home'. Finally, the 'relevance index' has a more international outlook than the primarily internal security-focussed ANV methodology.

Nevertheless, just like the other two approaches, the 'relevance index' also has its drawbacks. Firstly, it is not clear whether 'relevance' – both positive and negative – is most appropriate for EWEA assessments. The goal of EWEA assessments is to identify how unstable countries might *negatively* affect Dutch security and this can be prevented. The 'relevance index', however, presents a mixture of positive and negative impacts. This means that countries that may positively contribute to Dutch security (e.g. the US or key allies) will score highly and may outrank countries with negative effects.[15] However, at the heart of the matter for EWEA is not that a country like 'Syria' also has positive effects for the Netherlands, but more importantly how negative externalities resulting in instability can be controlled and prevented. Hence, it advisable to create a narrower and 'negative relevance' approach as those negative effects are what the Netherlands needs to act upon in an EWEA context. An easy way to solve this might be to make a clear distinction between a positive and negative relevance and present the measures separately.[16]

A second drawback is that the index cannot conclusively measure the actual impact as it uses proxy indicators. The choice for those proxies is moreover not always justified or convincing. For example, the 'relevance index' measures territorial threats by the share of 'international military power' through the Great Power Index (of the Pardee Centre). But whether negatively relevant countries actually pose threats is not known and is mainly context dependent. Likewise, whether the 'number of nuclear installations' is linked with the likelihood of a fallout (even when corrected to take distance into account) is uncertain and context-dependent. Some of these problems can be ameliorated by better metrics, but the fundamental problem is that using proxies will inherently mean that the actual impacts on the Netherlands are difficult to quantify.[17] This is the main reason why a quantitative analysis has to involve some qualitative

15 While this is debated, it is moreover common to assume that security threats are best viewed as a negative sum (the negative and positive effects should not be mixed). See Duncan Snidal, "Relative Gains and the Pattern of International Cooperation," *The American Political Science Review* 85, no. 3 (1991).

16 Closely related, it might therefore be equally relevant not only to focus on a 'high negative relevance' but also include a 'low negative relevance' but presented as a continuum.

17 Despite introducing more specific metrics that hopefully alleviate some of the problems, lying at the heart of the matter this criticism can also be levied against the model developed in this paper (thanks to a reviewer for pointing this out).

assessments either in the form of an interpretation of model outcomes and/or – as we have proposed – in the form of scenario analyses for those countries scoring highly.

A third consideration is whether the index is sufficiently 'international' and 'comprehensive'. Compared to the ANV the index is more externally focussed yet it also misses important linkages between external developments and Dutch security. For example, elements such as the Dutch international position, the physical safety of Dutch citizens abroad, piracy, terrorism, and geopolitical risks are not included. Ideally, such 'transmission belts' will be included in an index that measures the effects of instability on Dutch security interests. As a corollary, while the interests of key allies (defined as NATO and EU allies) are represented in some indicators, it is advisable to consider those interests separately so that their direct impact on the Kingdom of the Netherlands and their impact on its allies can be separately understood and judged.

Finally, there is a need to pay closer attention to the technical details and operationalisation.[18] A technical report accompanying the 'relevance index' clearly points to the need to correct for a 'correlation between sub-components', 'missing data', 'a better weighing system', experimenting with other 'cut-off points for high relevance' and a 'further improvement of the indicators underlying relevance'.[19] If a new index is to be developed, it seems advisable to take some of those suggestions on board. To this list of improvements an important addition should be the way in which concepts are operationalised. For example, territorial threats are measured as a stock of power (not discerning threats from support) while it is common to make threat assessments based on capabilities*intentions*actions. Generally, more conceptual considerations could be added to some of the chosen proxies in order to increase precision and concept validity. Finally, it is advisable to reconsider the ways in which values are normalised. At present, they are min-maxed per region, rather than a fixed worldwide standard. This means that there are always higher and lower performers in the region.

1.5 Conclusion

What does this review of the three existing systems mean for the development of a convincing EWEA impact methodology? There are four key conclusions:

1. While they are well developed, none of the three existing approaches, in their present form, is sufficiently convincing for EWEA impact assessments. The review shows that each model requires additional technical developments in order to be truly convincing;

18 Note that the methodology was developed as a first iteration and was transparent as to its limits.

19 HCSS, "Method Assessment Framework," 36.

2. The review shows that there is an inherent tension/trade-off between impact assessments. Assessments that consider the actual and precise effects on Dutch security interests provide a good insight into the real dangers (and opportunities) but are labour intensive and cannot really deal with a larger number of cases. Those systems that can deal with larger amounts of cases and are thus able to provide comprehensive overviews are more imprecise as they digress from considering the actual impact of instability and tend to proxy potential impacts. In such cases, it is not clear whether the assumed impact is likely to materialise or not;

3. For all existing methods there is a need to take the international context better into account. A more integrated effort is needed so that international economic effects, climate change, and social changes are better captured in the concepts and subsequently the proxies;

4. All three methodologies could be made more suitable for EWEA purposes. Existing methodologies are derived from approaches to measure general security impact assessments – e.g. geopolitical tension, climate change, and social movement within Europe. EWEA impact assessments have the potential to be more precise; they only focus on the threat from instability, conflict and violence and between countries on the periphery of Europe. Research suggests some important caveats: the largest threats to Dutch (Western) interests come from countries that are relatively well developed and integrated in the world economy and experience upheaval, rather than just fragile states.[20] The reason for this is that these states transfer security threats more easily to the Netherlands through existing economic and social connections and it is similarly the reason why instability in Libya, Syria and the Western Balkans – relatively well-connected states – have had a much larger impact on Dutch security interests than instability in the Sahel.

20 See section 4.

2 Towards an improved EWEA specific impact assessment framework

The key question is how to solve the tension between quick and detailed impact assessments. This report suggests doing so by considering what place the assessment has in the EWEA process.

The present process involves six steps following a proposal by Pronk and Kruijver (2020): 1) a scan of countries (with regard to their potential impact and risk); 2) a longlist (based on joint risk assessments); 3) establishing a shortlist/watchlist of a few countries (based on various criteria); 4) a conflict analysis; 5) a theory of change; 6) execution.[21] In this design, the first two steps in EWEA deal with large amounts of cases while the third and fourth steps consider a select number of cases. While they are desirable in every phase, it is particularly the 3rd and 4th steps that require a more in-depth analysis.

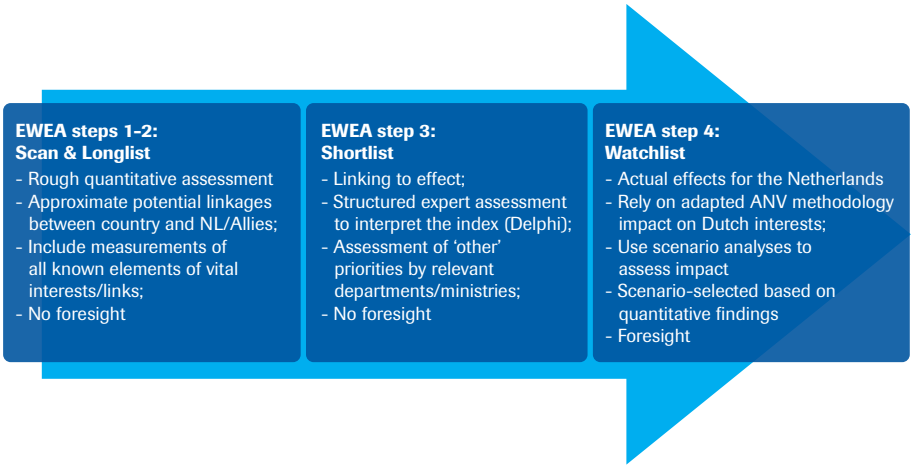
This reflection is the key to solving the inherent tension between methods than can deal with a large number of cases and those that are more precise but cannot handle much data. This report proposes that a quantitative assessment is applied to the first two phases of scanning and longlisting, whereas the 3rd and 4th phases (shortlist, watchlist and conflict analysis) can then be based on a qualitative methodology that allows for an actual impact assessment (see figure 1).[22] The 3rd phase can involve a structured expert assessment of the indices (a Delphi).[23] The 4th phase can then build on the scenarios and the ANV methodology which are already operationalised indicators for scenario analyses. At present, the ANV methodology is undergoing changes in order to better account for an international context, and it is advisable to make some final adaptations so as to make it also suitable for EWEA assessments.

21 See Pronk and Kruijver, *Wijzer in de Toekomst*.

22 The third step has been added on the basis of suggestions by a reviewer.

23 Bob Deen, Adája Stoetman and Kars de Bruijne, "From indices to insight – A proposal to enhance the risk assessment of the Dutch Early Warning/Early Action process," (The Hague: The Clingendael Institute, forthcoming September 2021).

Figure 1 Proposed EWEA impact methodology



2.1 Mind the gap: using 'transmission belts'

A quantitative approach however comes with one drawback: it creates a gap between the potential impact and the actual impact on the Netherlands. Therefore, we propose to focus on so-called "transmission belts" (figure 2). Transmission belts are mechanisms along which external security developments can manifest themselves internally. For example, the best predictors of the impact of transnational organised crime in a country on the Netherlands are existing social connections, such as the amount of general trade, the presence of diaspora groups and flight movements.[24]

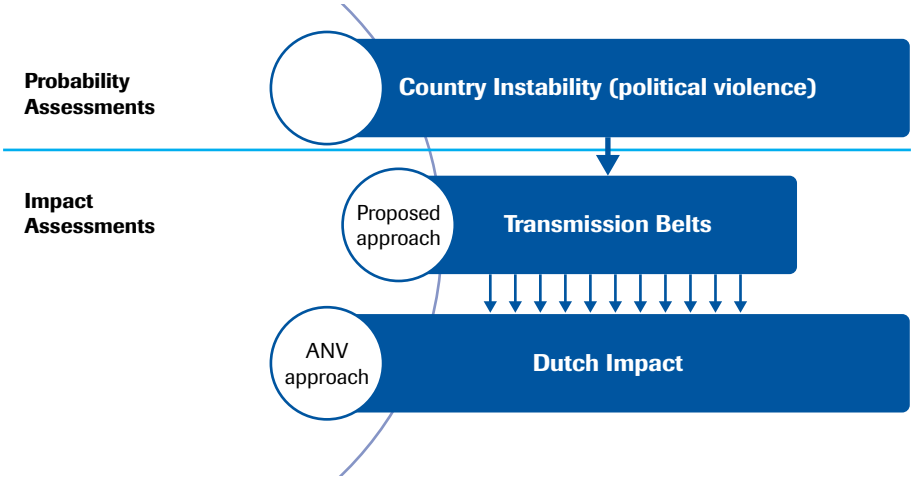
There are four reasons for making use of 'transmission belts'. Most importantly, EWEA assessments are based on very general developments (e.g. instability in Ivory Coast) and very often considering how such general developments affect impact criteria leaves too much room for interpretation. A different approach that helps to narrow the gap between instability and the actual effect thereof is urgently needed. Second, a decade of working with in particular the ANV methodology has led to experiences where certain risks do not 'score'. In some cases, this has to do with time frames, as threats only materialise after more than five years (e.g. climate change). In other cases, the impact criterion has not been able to capture the threats properly. For example, a particular

24 Franca van der Laan and Margriet Drent, "Veranderende veiligheidsomgeving – Grip op het grenzeloze werk van de Nederlandse Politie," in: Cahier Politiestudies (2017); European External Action Service, *EU Global Strategy*, (Brussels: EEAS, June 2016).

caliphate in Syria did not score as a separate threat (only its effects such as migration) in advance.

Third and overly simplified, EWEA assessments tend to assume that more instability means a more serious impact on Dutch security interests. The primary motivation is that an EWEA assessment seeks to identify emerging conflict early and looks for means to ameliorate the resulting problems. But the specific effects of instability on the Netherlands emerge in a myriad of ways. Transmission belts would allow us to consider these effects in more detail. Finally, for some transmission belts it is very much the case that they are important *sui generis*. For example, the existence of a caliphate, climate change or unstable surroundings are in and of themselves problematic and need to be prevented. Current efforts to measure effects such as deaths, extremist appeal and instability do not account for the importance attached to the phenomenon itself.

Figure 2 Integrated process proposal



2.2 A brief review of the literature on potential EWEA 'transmission belts'

Which transmission belts exist?

A first point of observation is that the academic literature casts doubts on the monocausal relations between instability and its impact on security interests. Recent research points to 'flimsy empirical foundations of the conventional wisdom about the dangers posed by weak states' and that the "relationship between state weakness and

spill over [security impact] is not linear. It varies by threat".[25] In fact, a review of the literature points to the fact that it might not be the countries with the most violence or the most instability but the types of countries and particularly their integration in the world economy that might determine whether violence has an impact on Dutch security interests.

Consider the relationship between violence in the host country and its impact on the Netherlands concerning three 'threats': terrorism, organized crime, and migration. Research shows that terrorist threats to Western interests often stem from a particular type of country: a country with somewhat weak but not failed state structures, a connection to the world economy, international banking, easy transportation, communication, global trade flows, diaspora connections, more wealthy areas and diverse ethnic societies where they can easily mingle.[26]

Countries with weak state structures that are in active conflict mainly play a role as transit and smuggling areas.[27] It is for that reason that Saudi Arabia, the Philippines, Pakistan, Indonesia and Lebanon (and Yemen before that) have been the backbones of large jihadi networks.[28] Political violence – particularly intra- and inter-state – seems to be inversely related to the impact on Dutch security: more violence undercuts the characteristics that make a state attractive zones for terrorist organizations. To put it bluntly, substantial violence in Saudi Arabia or Pakistan might reduce the ability of a large terrorist organization to operate and this therefore reduces threats to the Netherlands.

A similar pattern exists for organized crime. Organized crime tends to flourish in areas that are well connected to the world economy; that means deregulation, strong communication and transportation channels and large-scale commodity flows, coupled with weak oversight. This is one of the reasons why the Netherlands is a global drugs hub and why wealthy West African countries like Nigeria and Ghana are leading organized crime in the region.[29] Research moreover suggests that this changes on a sector-by-sector basis: drug smuggling requires large commodity flows whereas drugs

25 Stewart Patrick, "Weak States and Global Threats: Fact or Fiction," *The Washington Quarterly* 29, no. 2 (2006): 28.

26 Ken Menkhaus, "Quasi-states, Nation-building, and Terrorist Safe Havens," *The Journal of Conflict Studies* 23, no. 2 (2003); Ulrich Schneckener "How transnational terrorists profit from fragile states," *Stiftung Wissenschaft und Politik German Institute for International and Security Affairs* (2004).

27 Menkhaus, "Quasi-states, Nation-building, and Terrorist Safe Havens," 15.

28 Schneckener,"How transnational terrorists profit from fragile states," 30.

29 Stephen Ellis, "West Africa's International Drug Trade," *African Affairs* 108, no. 431 (2009): 173.

production benefits from 'ungoverned spaces' and can consequently take place in countries with high levels of violence (Colombia and Afghanistan).[30]

The specific form that political violence takes is also important. Electoral violence is often temporal and might lead to widely broadcasted events and temporary instability but not to changed patterns. But substantial intra-state and particularly inter-state violence might actually undermine favourable characteristics. For example, it might *decrease* (rather than increase) the role of organized crime in the country. In certain cases, more violence might paradoxically be beneficial to Dutch security interests.

Finally, we must consider the 'threat' of migration. An abundance of research has shown that in addition to violence[31], migration is driven by a number of factors, but most crucially economic development: development improves the ability to migrate both in terms of increasing awareness of deprivation as well as financially enabling migrants to put well prepared plans into action.[32] That means that the effects of violence on migration patterns are complicated.

There are various other examples where the relationship between instability and the security impact is far from obvious. For example, increasing levels of violence may actually increase the international position of the Netherlands as it is put in a situation where it can provide assistance to and strengthen ties with certain regimes. Similarly, more violence in countries might mean that countries will focus on their domestic issues and pose a lesser territorial threat to the Netherlands. Similarly, high levels of political violence are likely to impact the economy of those particular countries and thus decrease CO_2 emissions. Zoonotic transmissions might be limited by violence as economic drivers for closer contact between humans and animals are removed.

2.3 Proposed impact categories

Based on this literature, the HCSS methodology and the impact categories that are contained in the ANV methodologies, this section proposes to use the following set of potential transmission belts for each of the six vital interests. Table 2 lists the new Clingendael proposal and contrasts it with the existing HCSS and ANV models.

30 Patrick, "Weak States and Global Threats," 42.

31 Idean Salehyan, "Forced Migration as a Cause and Consequence of Civil War," in *Routledge Handbook of Civil Wars*, eds. Edward Newman and Karl DeRouen, Jr. (New York: Routledge, 2014), 269-271.

32 Mathias Czaika and Marc Vothknecht, "Migration and aspirations – are migrants trapped on a hedonic treadmill?" *IZA Journal of Migration* 3 (2014); Matthew Kirwin and Jessica Anderson, "Identifying the factors driving West African migration," *West African Papers* 17 (Paris: OECD Publishing, 2018).

Table 2 Proposed Clingendael 'Transmission Belts'

Vital Interest	ANV model*	HCSS model**	Clingendael Proposal
Territorial Security	Inter-state threat (NL)	Inter-state threat (NL)	Inter-state military threat to NL
	Inter-state threat (Allies)	Inter-state threat (Allies)	Inter-state military threat to Allies
	International Position (NL)	-	International Position NL
	-	-	International Position Allies
	Digital space (NL)	-	-
	-	-	Terrorist safe havens (expansionist)
Physical Security	Death, Disease, Deprivation Citizens (NL)	-	Citizens of Kingdom
	-	-	Citizens of Allies
	-	Pandemic Risk	Pandemic Impact
	-	Nuclear Facility	Nuclear Facility
Economic Security	Costs	Dutch trading partners	Dutch trading partners
	Vitality Dutch Economy	Overall Importance to World Economy	Overall Importance to World Economy
	-	-	Piracy
Ecological Security	Biodiversity (Netherlands)	Biodiversity (in country of study)	Biodiversity (country of study)
	-	-	Climate Change (country of study)
Socio Political Security	Social-societal impact	Social links (various applications)	Social links (various applications)
	Harm to democratic institutions	Harm to democratic institutions	Harm to democratic institutions
	-	Migration	Migration
	-	Crime	Crime
International Order & Stability	Rules-based system	Rules-based system	Rules-based system
	-	-	Instability
	-	-	Geopolitical risks

* = Clingendael method follows ANV
** = Categories by author, in reality measured by various indicators

Territorial security is operationalised in the ANV methodology as 'Digital space' and the 'Dutch International Position' in addition to Inter-state threats (Dutch and Allies). The HCSS methodology includes a compound score for inter-state threats and adds cyber elements. This methodology also proposes to include the 'international position' of the Netherlands (like the ANV) and the position of its allies. The division made by

the ANV to consider the impact on allies and the Dutch separately is maintained. In addition, the HCSS' notion that cyber/digital space is an important threat but might be best understood as an inter-state threat is shared here as well. Finally, from ongoing discussions the impact criterion does not score well for the presence of non-state armed groups that might mount attacks (e.g. a caliphate). To this end, the presence of Violent Extremist Safe Havens is included as a separate category.

Physical security is operationalized in the ANV methodology as a set of measures on deaths, physical harm and the deprivation of essentials for Dutch citizens on Dutch soil. The HCSS rightfully diverts attention to 'transmission belts' by pointing to the risk of pandemics and a nuclear fallout. We include both the ANV and the HCSS suggestions and propose to 'internationalize' these interests in three ways. Not only are Dutch citizens in the Netherlands considered but also those who are abroad, and the inhabitants of the Kingdom (rather than only those of the Netherlands) as well as the citizens of its allies are also considered.

Economic security is operationalized in the ANV methodology as 'costs' and 'increases in deaths and unemployment' (e.g. 50 million in costs and a 1% increase in unemployment). To assess the impact of the instability of countries on Dutch interests, the HCSS has focused instead on the role of countries as a trading partner of the Netherlands, and the role of these countries within the world economy, where it considers various dimensions such as trade and investment portfolios. This operationalisation indeed allows a more direct connection between economic interests and countries to be measured and is best followed. We add to their list the transmission belt of piracy to also assess the potential perturbation of flow security interests.

Ecological security is narrowly operationalized as threats to biodiversity within the Netherlands in the ANV methodology (the effects of rising sea levels are ultimately scored in 'costs' and 'physical harm'). The HCSS does not focus on the effects on biodiversity in the Netherlands but on the effects on biodiversity in other countries. In contrast, this report proposes to focus neither on the threats to biodiversity in the Netherlands nor in other countries but instead to consider the contribution and efforts of the country in question to combat climate change. Climate change will be the main transmission belt through which instability might impact ecological interests. The loss of biodiversity in certain countries might be tracked in some cases (e.g. the Amazon Rainforest) but in general this is expected to have only subsidiary relevance to Dutch ecological interests.

Social and political stability. ANV indicators are purely focused on the Netherlands and the distance between developments in countries around Europe and the Netherlands is too large to draw any meaningful conclusions. For this reason, this report proposes to focus on the transmission belts of the impact on Dutch socio-political interests. The HCSS, for example, includes diaspora linkages, migration streams and hybrid

activities and these are indeed linkages found in the literature (see above). In addition, it is important to consider the role of countries involved in the drugs trade (as the Netherlands is a major hub).

International Order and Stability. In 2018, the ANV added a sixth security interest: international order. This was understood mainly as an international rules-based system which is believed to protect the interests of small states like the Netherlands. Indicators focus on the norms of the use of violence, financial-economic norms, multilateralism and human rights and the HCSS has helpfully developed proxies for these. However, since the implementation of the sixth vital interest two main problems have been encountered: a) the human rights criterion often leads to a high score while not necessarily harming the vital interests of the Netherlands as such; b) the framework considered few actual developments such as increasing levels of violence, conflict and instability. Therefore, this sixth vital interest will be renamed as 'international order and stability'. Moreover, geopolitical considerations (e.g. a loss of influence) are not included and can be relevant in various other respects (competitiveness, territorial threats). Both elements are added in our proposal for an index.

2.4 Technical considerations

Finally, a convincing impact model for EWEA purposes should include a number of technical improvements:

Use the Kingdom of the Netherlands as a 'referent object'. The Netherlands is no longer solely defined as the territory of the Netherlands next to the North Sea but refers to the Kingdom of the Netherlands in its entirety, thereby also including the special municipalities (Bonaire, St. Eustatius and Saba), which enjoy the same rights and responsibilities as the municipalities in Northern Europe. The islands of Aruba, Curaçao and Saint Martin are also included as the Kingdom is responsible for their joint protection.[33]

Consider allies' interest in territorial and physical security only. The interests of allies are not all relevant to the Netherlands. For example, whether the French economy has adverse effects on a conflict in Cote d'Ivoire should not be part of the index. Instead, an ally's interests should be taken into account insofar as they derive from international obligations. This means that only the territorial and physical interests of allies are included in the index.[34]

33 Statuut van het Koninkrijk, Artikel 11 jo. 27:3, 34:1.

34 Some debate is warranted as to whether hybrid operations should also consider allies' interests as NATO considers hybrid operations and democratic interference also as activities falling under Article 5.

Use a restricted conception of allies. There are three ways to define Dutch allies. One is to argue that Dutch allies are EU and NATO members that have been given treaty obligations. A second one is to focus on large countries that can impact Dutch security. A third option is to define allies as a specific set of allies based on criteria such as like-mindedness or closeness. There are problems with all three in terms of logic (why only large countries? Are we really set on protecting the territorial interests of EU and NATO member states? On what basis can a set of countries be defined?). For this methodology we encounter a specific problem in that separate data have to be collected for each country. For that practical reason we have defined relevant Dutch allies as France, Germany, the United Kingdom and the United States.

Use 5-year averages. Quantitative data varies over time and there is a risk that temporary outliers drive results. Moreover, foresight theory suggests that estimates are best based on long-term trends rather than temporary outliers. For this reason, this framework intends to use 5-year averages. This allows outliers to be omitted and ensures that a conversative estimate of indicators is engrained in the technical specifications of the model.

Have clearly developed qualitative codebooks. There are various variables that cannot be measured quantitatively, either as data is not (yet) available or when the indicator is difficult to measure (e.g. whether states have an intention to harm certain interests). When one resorts to qualitative variables it is important that a codebook guides the choices made by experts and that the sources on which the assessments are based are transparent (and, where possible, predefined to ensure consistency over time). Finally, it is advisable to ensure intercoder reliability which means that the data should be coded by more than one person and overlapping scores are calculated (where, as a rule of thumb, an 80% overlap is considered to be a correct score). To increase intercoder reliability, a brief questionnaire may be provided to a group of analysts to score the qualitative variables.

Use normalisation rules that are based on world min-max values rather than regions. Normalisation – expressing indices with a different scale on the same scale, e.g. score all indices on a scale from 0-10 – is needed in order to allow for a comparison of indices and compound scores. Current scans have been based on regions and have thus been based on a regional minimum and maximum. However, the consequence of this approach is that regions can no longer be compared, as there will always be countries in a region that score highly (or lowly). By design, each region will have threats which hamper prioritisation across regions. Worldwide base rates for variables and normalised scores are based on those base rates. A simple workaround to collecting all data will be to take the worldwide min-max values and use these to define the normalised scale.

Use deviation of mean-activity. Data is usually normalised through min-max values. However, the problem is that baselines disappear. Consider, for example, an index

based on the number of cyberattacks against the Netherlands by a certain country. If we min-max the activity of 10 countries, we fail to understand the average number of attacks that those countries have been involved in beyond the Netherlands. As a result, the risks may be distorted. To see this, consider the hypothetical example of a large country sponsoring 10 attacks against the Netherlands and a small country sponsoring 10 attacks. But the large country is on average involved in 50 attacks against countries while the small country is involved in just 5. As a result, given the deviation from 'normal behaviour' the threat from the large country is lower than that from the small country. For this reason, the index takes a deviation from the mean country-activity for some variables where normal min-max values are not appropriate.

3 Indicators and metrics to measure vital interests

This chapter makes a proposal as to which quantitative proxies should be used to measure transmission belts of violent conflict, instability and violence on vital Dutch interests. It is meant as a proposal to inform ongoing work and new iterations.

3.1 Indicators for 'Territorial Security'

An impact assessment of threats of violence and conflict concerning 'territorial integrity' consists of three elements: a) a direct military threat to the territorial integrity of the Netherlands or its key allies (France, Germany, the United States and the United Kingdom); b) terrorist attacks on Dutch or allied soil; c) the international position of the Netherlands. Each element results in a specific score.

Direct territorial threats

Direct territorial threats can be extracted from merely the capacity of actors. For example, military spending is taken as a proxy for military threats. However, it is clear that actual threats at least require gauging the intentions of countries. A well-known set of elements for territorial threats are: a) capacity; b) intentions; and c) actions. We use this set-up as a basis. The below table operationalizes each element.

Indicator(s)	Type	Indicator(s)	Source(s)
Military capacity to undermine Dutch territorial interests?	Quantitative	Defence spending (in dollars, %GDP) Expressed as a deviation from the mean EU %GDP [for the Dutch Calculation]. Expressed as a deviation from the mean spending of Germany, France, the United Kingdom (control for US) *Normalized min.-max. values 0 to 1.*	ISSS – military balance
Intention to undermine Dutch territorial interests?	Qualitative	Manual coding (see codebook) *Ordinal variable (0, 0.5 1)*	Manual

Indicator(s)	Type	Indicator(s)	Source(s)
Actions to undermine Dutch territorial interests ?	Quantitative	Counting activities[35] against the Netherlands or other members of the Kingdom (Caribbean islands) Counting activities against key allies. *Expressed as a deviation from the mean activity of the country towards all other countries. Normalized min.-max. values 0 to 1*	ICEWS
	Quantitative	Number of offensive cyber operations against the Netherlands or other members of the Kingdom (Caribbean islands). Number of offensive cyber operations against key allies. *Expressed as a deviation of the mean activity of the country towards all other countries. Normalized min.-max. values 0 to 1*	Cyber Operations Tracker
	Actions and cyber operations expressed as averaged scores.		

In relation to the proposed sources there are three observations to be made:

a. Rather than using an index that includes all sorts of power resources (e.g. a great power index), compound indices include elements that can or cannot be used for military purposes (e.g. steel production, GDP or population). It is better to focus on specific military strength. We suggest using the specific indicator of military spending expressed as % of GDP;
b. Ideally an alternative to the 'Cyber Operations Tracker' is used as the data is not complete (e.g. 1 event by the Netherlands since 2005 and 90 by Russia over the course of 15 years). However, no reliable alternative is currently available;
c. Military spending can be taken from the SIPRI military expenditure database (freely accessible) or ISSS. The drawback of the ISSS data is that it is neither available in excel format nor freely accessible. However, the ISSS data is generally more helpful as it includes specific tallies of the numbers of military equipment and is generally considered to be authoritative. Furthermore, it allows one to discern how money is spent (types of weapons, the offensive/defensive balance etc.).

To arrive at one score for a 'direct territorial threat to the Netherlands (and – separately – one for threats to its allies), we use the calculation capacity * action*intentions.

35 The HCSS proposition includes CAMEO codes 190, 191, 192, 194, 195, 200, and 204 with filter for *target country*. See Appendix 1 in "CAMEO: A New Event Data Framework for the Analysis of Foreign Policy Interactions" for a description. Proposition to also include Category 13 (Threaten) 130-137 in the calculation.

Terrorist attacks

Impact assessments of terrorist attacks on Dutch soil have hitherto not been part of quantitative impact systems in the Netherlands.

Using available data on terrorist attacks (e.g. TE-SAT (Terrorism Situation and Trend Report) or the Global Terrorism Database (GTD)) will not be helpful. These databases invite a quantification of the number of terrorist attacks in other countries to be calculated but these have little bearing on their impact on the Netherlands. Instead, information on terrorist plans in the Netherlands and Europe would be needed. While these databases do contain this information, they do not discern where the participants originate from which means that no transmission belt can be established between a country and the Netherlands.[36]

For example, the Charlie Hebdo assailants were two French citizens but were aided by Al Qaida in the Arabic Peninsula (AQIP). A reliable measure to assess EWEA impacts from Egypt would ideally account for both the origin of the perpetrators (French) and the potential connection that the perpetrators had with cells abroad. The work of Thomas Hegghammer explicitly considers this linkage.

A second element of terrorist threats that is not well captured is the influence of the terrorist movement on radicalizing citizens in the Netherlands and Europe. Measuring this link is difficult due to the myriad of linkages that can exist. One thing that has been clear, though, is that territorially-based extremism has had the strongest appeal for citizens in European societies. One way to proxy this transmission belt is to observe the goals of violent extremists and whether they seek to establish a caliphate. This would mean that the presence of a caliphate or a desire to create one is in itself a threat to the Netherlands' (or its allies') territorial integrity. In future iterations it might also be useful to explore proxies on how instability abroad might be linked to the appeal of right-wing and left-wing extremism.

It is important to stress that 'Jihadi Plots in the West' by Thomas Hegghammer has to be updated as this only concerns Jihadi plots while terrorist threats are clearly more wide-ranging than that. Moreover, Hegghammer's data range from the 1990s up until 2015. This update could be based on the GTD data (which includes all plots in the Netherlands and its allies until recently) which would then involve: a) specific research on the background of individuals involved in the plot; and b) a check as to whether the coding of plots is comprehensive in relation to links with organizations abroad.

36 The GTD does indicate whether groups have been aided by terrorist cells abroad.

Indicator(s)	Type	Indicator(s)	Source(s)
Terrorist attacks in the Kingdom of the Netherlands	quantitative	Share of the number of plots planned from country X (total no. of plots) and the share of country of origin perpetrators (from the total no. of perpetrators) in the Kingdom of the Netherlands (NL and the Caribbean) *Normalized in min./max. values of indicator (0 to 1)*	Jihadi Plots in the West (Thomas Hegghammer)
Terrorist attacks in the territories of allies	quantitative	Share of the number of plots planned from country X (total no. of plots) and the share of country of origin perpetrators (from the total no. of perpetrators) in the UK, Germany, France and the United States. *Normalized in min./max. values of indicator (0 to 1)*	Jihadi Plots in the West (Thomas Hegghammer)
Risk of territorially-based caliphate	qualitative	Manual coding (see codebook) *Expressed in 0 to 1.*	Manuel

To arrive at one score for a 'terrorist threat' to the Netherlands (and – separately – one for threats to its allies), we use the calculation Terrorist attacks (NL/Allies) + Caliphate, normalized from 1-0. The caliphate weight is ⅓ and the terrorist attacks is ⅔ – to account for the fact that both variables might covary and that actual terrorist attacks are a bigger problem than the existence and influence of a caliphate.

Position of the Netherlands

A third and final element of the Dutch territorial interest is the Dutch international position, as well as the position of its allies. In the ANV methodology international positions (criterion 1.2) are measured as actions (demonstrations, threats to citizens abroad); political relations (diplomatic interactions); and 'non-political' relations (boycotts). In addition to these three ANV elements, new data sources allow for international perceptions to be measured (see the HCSS proposal). With this in mind, the following operationalization of the Dutch and International position is proposed.

Indicator(s)	Type	Indicator(s)	Source(s)
Demonstrations against the Netherlands	Quantitative	Counting the no. of demonstrations and riots in country X against the Netherlands *Normalized in min./max. values of indicator (0 to 1)*	ACLED
Diplomatic bilateral relations	Quantitative	No. of years of representation by NL in the country in the last x years divided by x years. No representation, no value. No. of years of representation by country in NL in the last x years divided by x years. No representation, no value. *Overall value of domestic * foreign representation. Normalized by min./max. values (0 to 1)*	Lowly institute[37]
Boycotts of Dutch products, social and cultural events.	Quantitative	Sanctions by country x vis-à-vis Kingdom of the Netherlands. *Expressing a deviation of worldwide means and normalized by min./max. values (0 and 1).*[38]	Global Sanctions Database[39]
Perceptions of the Kingdom of the Netherlands	Quantitative	Overall CAMEO scores vis-à-vis Kingdom of the Netherlands *Normalized at 0-1 at the worldwide min./max. values.*	ICEWS
Same measures for key allies.			

In relation to the proposed sources, it is important to make two observations:

- An embassy closure is uncommon and when it is closed this is often in response to changing foreign policy interests rather than diplomatic incidents. Ideally a better proxy is identified.
- ICEWS scores include a very large number of elements that measure more than only 'perceptions' (e.g. direct military threats) and ideally a specific selection is made (and tested). Furthermore, there is an overlap with the ICEWS indicators under direct territorial attacks (that measure a motivation to damage). If ultimately all scores are combined into one general score, it is advisable to remove the overlap between the two ICEWS variables.

To arrive at one score for the position of the Netherlands (and – separately – one for threats to its allies), we assume that there are no clear differences in weights between the indicators and therefore propose aggregating all values and to normalize from 0 to 1.

37 "Global Diplomacy Index," Lowy Institute, 2019.

38 The data is not normally distributed and the calculation will bias results towards large countries. Rank distributions can be considered.

39 "The Global Sanctions Data Base," Hochschule Konstanz, Drexel University School of Economics, and Kiel Institute for the World Economy (last updated in March 2021).

3.2 Indicators for 'Physical Security'

Impact assessments of threats of violence and conflict concerning 'physical security' consist of three elements: a) death or physical harm to citizens of the Netherlands or citizens of key allies (France, Germany, the United States and the United Kingdom); b) the potential impact of pandemics; and c) fallout from nuclear facilities. Each element results in a specific score.

Harm to citizens

In the ANV direct harm to citizens is only measured as harm to Dutch citizens in the Netherlands and focusses on death, injury and deprivation. We focus on citizens of the Kingdom of the Netherlands instead. To measure the transmission belt we assess risks (measured by the number of citizens abroad and a presence in Peace Support Operations) as well as actual violence against citizens.

Indicator(s)	Type	Indicator(s)	Source(s)
Physical threat to Kingdom citizens.	Quantitative	Number of Kingdom citizens in the country; *Expressed as five-year average of the number of activities. Normalized at 0-1 at worldwide min./max. values*[40]	MFA internal
	Quantitative	Counting incidents of political violence and protests involving Kingdom citizens (e.g. protests for or against embassies, companies, or individuals). *Expressed as five-year average of the number of activities. Normalized at 0-1 at worldwide min./max. values.*[41]	ACLED data
	Quantitative	Number of Kingdom citizens present in peace support operations. *Expressed as five-year average of the number of activities. Normalized at 0-1 at worldwide min./max. values.*[42]	ISSS military balance.
Physical threat to the citizens of allies.	IBID		

40 *Scaled variable: 1 (0-100); 2 (100-400); 3 (500-1000); 4 (1000-2000); 5 (above 200). Normalized from 0-1.*

41 For a regional analysis a simpler variable of 1-3 can be constructed where 1 means at least one incident, 2 means 5-10 incidents and 3 means more than 10. Subsequently the variable can be normalized.

42 Without worldwide indicators a *binary variable might be considered.*

To arrive at one score for threats to the citizens of the Kingdom of the Netherlands (and – separately – one for threats to its allies), we assume that there are no clear differences in weights between the three indicators and therefore propose to aggregate all values and to normalize from 0 to 1.

Specific Physical risks: Pandemics and Fallout

A second way in which countries can be considered as threats to physical security is the risk of specific incidents, most notably pandemics and a nuclear fallout.

The risk of pandemics has already been pointed out in both Dutch and international security assessments.[43] Since a few years, therefore, serious efforts have emerged to assess the risk of zoonotic diseases (transmission from animals to humans). Some indices consider proxies such as deforestation or meat production to assess epidemic risks.[44] A new initiative by USAID, CDC and various international health partners called the "Emerging Pandemic Threats Program PREDICT" has mapped zoonotic risks. The index maps regional risk factors and actual observations of zoonotic transmission.[45]

The risk of a nuclear fallout is operationalized by the HCSS as the "number of nuclear installations". The problem is that the risk of a fallout will depend on a number of variables (e.g. meteorological conditions, the age of nuclear plants and their maintenance etc.). Generally fallouts are very much dependent on the proximity of the countries to the Netherlands.[46] As a result, we propose to weigh normalized scores by the (normalized) distance to the Netherlands.

43 Analistennetwerk Nationale Veiligheid, *Nationaal Veiligheidsprofiel 2016* (Bilthoven: RIVM, 2016); Louise van Schaik, Maite Reece and Ernst Kuneman, "Climate change," in *Clingendael Strategic Monitor 2017* (The Hague: The Clingendael Institute, 2017).

44 E.g. "Meat and Dairy Production," Our World in Data (University of Oxford, last updated in November 2019) and "Improving joint risk assessment skills at the human-animal ecosystem interface in Africa," FAO (2018).

45 "PREDICT 1 & PREDICT 2 Surveillance," UC Davis One Health Institute.

46 Jos Lelieveld, Daniel Kunkel, and Mark G. Lawrence, "Global risk of radioactive fallout after major nuclear reactor incidents," *Atmospheric Chemistry and Physics* 12, no. 9 (2021).

Indicator(s)	Type	Indicator(s)	Source(s)
Source or multiplier of Pandemics.	Quantitative	USE predict data hotspot layer (Jones et. al) and the PREDICT test results. Calculation country risk: score hotspot map on scale (0-1) based on intensity coverage as well as a separate measure on number of observed transmissions based on 10 years (PREDICT 1 & 2), normalized at the min.-max. for per capita values. Both measures combined are divided by 2 to arrive at a 0-1 score.	PREDICT DATA
Source of nuclear fallout.	Quantitative	Number of Nuclear Installations (normalized at min.-max. values 0-1) weighted by the inverted distance (of capitals) to the Netherlands.	Atomic Energy Agency

To arrive at one score, we assume that there are no clear differences in weights between the two indicators and therefore propose to aggregate all values and normalize from 0 to 1.

3.3 Indicators for 'Economic Security'

The potential impact on Economic Security is calculated in three main ways: a) whether the country is an important trading partner; b) whether the country is an important hub in the world economy; c) whether piracy is present. Compared to previous iterations, the specific indicators are measured slightly differently.

Trading Partner

The first indicator is whether the country is an important trading partner. Rather than the UNCTAD data, we rely on CBS information to assess import and export volumes (UNCTAD data is more general). We additionally propose to also include investment portfolios in countries. For FDI we include the total investment volume and report separately on whether the investment portfolio includes a large share of agricultural investment. The reason for this is that instability and communal violence often have implications for the ability of Dutch farmers to operate (e.g. in Kenya and Uganda).

Indicator(s)	Type	Indicator(s)	Source(s)
Important Dutch trading partner.	Quantitative	Volume of imports from the Netherlands. *Normalized at worldwide min.-max. values (0-1)*	CBS
	Quantitative	Volume of exports to the Netherlands *Normalized at worldwide min.-max. values (0-1)*	CBS
	Quantitative	Size of FDI flows (not positions) from the Netherlands *Normalized at worldwide min.-max. values of Dutch FDI streams (0-.9). Substantial agricultural investments raise level by .1.*	OECD data

To arrive at one score for the economic connections of a country to the Netherlands, we assume that there are no clear differences in weights between the three indicators and therefore propose to aggregate all values and normalize from 0 to 1.

Role in world economy

A second indicator to assess threats to Dutch economic interests is to consider the country's relative role in the world economy. The intuition to do so is that a small country like the Netherlands benefits from an open world economy and that countries which promote this are contributing to Dutch security interests. To this end we consider three separate elements: a) the ability to do business in the country; b) the stock of natural resources that are important to the European economy and; c) the trading position of the country measured by its freight volume and port network. We propose the following operationalization:

Indicator(s)	Type	Indicator(s)	Source(s)
Harbinger of an open world economy.	Quantitative	Ease of doing business indicator. *Existing percentage value (average for past five years) at worldwide min.-max. values (0-1)*	WorldBank Easy of Doing business
	Quantitative	Size of fossil fuel reserve and REE. *Normalized at worldwide min.-max. values (0-1)*	Our World in Data / US Geological Survey
	Quantitative	Countries' trading position. *Measured by freight volume (normalized at worldwide min.-max. values (0-1) + the normalized share of harbour size (0-1) divided by 2.*	Mundi Index / UNCTAD.[47]

47 "Port liner shipping connectivity index, quarterly," UNCTADSTAT (United Nations Conference on Trade and Development).

To arrive at one score for the economic importance of a country to the world economy, we assume that there are no clear differences in weights between the three indicators and therefore propose to aggregate all values and normalize from 0 to 1.

Piracy

Finally, the threats stemming from piracy are not currently part of an impact assessment but have proven to be important in the past (Horn of Africa) and are an important transmission belt as it can hamper Dutch 'flow security'. To this end, we rely on a quantification of incidents from the International Maritime Organization (IMO) that provides data back to the mid-1990s on incidents off the coasts. A key problem is that the perpetrators are not easily identified and that various events take place in international waters. The simple workaround is to use the 'search functions in the IMO' Piracy and Armed Robbery database to download events off the coast for each county.

Indicator(s)	Type	Indicator(s)	Source(s)
Piracy problems	Quantitative	Piracy and Armed Robbery database *Quantification of events and normalized at worldwide min.-max. values (0-1)*	International Maritime Organization

3.4 Indicators for 'Ecological Security'

The potential impact on Ecological Security is focused first and foremost on a specific transmission belt: climate change. While threats to biodiversity in countries bordering Europe may constitute a minor threat to Dutch interests, the real threats derive from countries' role in (combating) climate change. Therefore, ecological threats are measured in three ways: a) carbon emissions; b) renewable energy capacity; c) ecosystem (bio)diversity. Unlike the ANV we do not focus directly on Dutch biodiversity and unlike the HCSS we consider climate change to be more prominent than biodiversity concerns abroad.

Indicator(s)	Type	Indicator(s)	Source(s)
Climate change	Quantitative	Emission levels *Expressed as a deviation from permitted CO_2 production. Subsequently min.-maxed for worldwide normalization (0-1)*	EDGAR[48]
	Quantitative	Renewable energy consumption *A state's renewable energy sources output as a percentage of its energy consumption normalized at 0-1*	BP[49]
Ecosystem (Biodiversity)	Quantitative	Biodiversity and habitat (50%), ecosystem services (20%), fisheries (20%) and water resources (3%) *Compound score weighted along the lines and normalized to 0-1 at worldwide min.-max. values*	Environmental Performance Index[50]

To arrive at one score for climate change, we realize that there is some correlation between the measurements and therefore weigh both indicators equally and normalize from 0 to 1.

3.5 Indicators for 'Socio-Political Security'

The potential impact on Socio-Political Security is comprised of four transmission belts: a) the social connections between certain countries and the Netherlands (through which threats can materialize); b) foreign interference in democratic institutions; c) the position of the country in migration flows to Europe; d) the amount of transnational organized crime and its connections to Europe.

Social connections

The social connection transmission belt is operationalized along two lines: diaspora communities and interaction between countries. Diaspora communities might be a transmission belt through which conflict in the country of origin manifests itself in the Netherlands (Kurds-Turks). Flight movement proxy contacts between two countries and beyond acting as a proxy also facilitate smuggling (particularly drugs).

48 "EDGAR – Emissions Database for Global Atmospheric Research," European Commission Joint Research Centre.

49 "Statistical Review of World Energy," BP, 2021.

50 "2020 EPI Results," Environmental Performance Index, Yale Center for Environmental Law & Policy (2020).

Indicator(s)	Type	Indicator(s)	Source(s)
Social Connections	Quantitative	Size of diaspora in the Netherlands. *Normalized at Dutch non-Western diaspora min.-max. values (0-1)*	CBS[51]
	Quantitative	Flight movement *Normalized at non-Western Dutch min.-max. values (0-1)*	JRC[52]

To arrive at one score, we aggregate both scores and normalize from 0 to 1.

Undermining democratic processes

The transmission belt of foreign interference in democratic processes is operationalized qualitatively. There is no separate measurement for allies.[53]

Indicator(s)	Type	Indicator(s)	Source(s)
Hybrid operations to the Netherlands	Qualitative	Presence, size, and scope of disinformation campaigns *Ranging from 1-5 (see codebook) and subsequently normalized at 0-1*	-
	Quantitative	Quantification of foreign interference attempts *Variable (1=yes, 0.5=limited, 0=no)*	MFA internal (extradition requests, intimidation)

To arrive at one score, we aggregate both scores and normalize from 0 to 1.

Migration as a transmission belt

A third element is the role of countries in contributing to migration to Europe. A political reality has now emerged where parts of the political spectrum consider migration to be a security threat. For other parts of the political spectrum, migration is not a security threat *per se* but it strongly affects the room for policy in this field and the

51 "Bevolking; leeftijd, migratieachtergrond, geslacht, regio, 1 jan. 1996-2020," CBS (last updated on July 23, 2020); "Bevolkingsontwikkeling; migratieachtergrond en generatie," CBS (last updated on July 24, 2021).

52 "Dynamic Data Hub," Knowledge Centre on Migration and Demography Data Portal (European Commission Joint Research Centre).

53 Given NATO's decision that the cyber domain is also considered to fall under Article 5, there might be arguments to include allies' interests.

ability to determine security policy. Keeping migrants 'out' is a policy discourse that is currently dominant.

This methodology does not seek to raise arguments about the true nature of migration and whether or not it poses threats to national security (which, apart from being very complicated to measure, is also a discursive process). It does, however, accept the reality that migration is politicized and in that sense it is important to be considered by policy-makers from left to right. Therefore, we have opted to include migratory pressures as a variable in the methodology.

To measure the linkage between a country and the Netherlands two proxies are proposed. The same proxies are also proposed for the EU, given the fact that Dutch interests in migration are jointly determined by EU policy.

Indicator(s)	Type	Indicator(s)	Source(s)
Migration to the Netherlands	Quantitative	Migration flows to the Netherlands *Normalized at Dutch non-Western diaspora min.-max. values (0-1)*	CBS[54]
	Quantitative	Transit country to the Netherlands *Binary variable (1=yes, 0=no)*	CTDC[55]
Migration to the EU	Ibid.		

To arrive at one score, we do not aggregate both scores as country-of-origin migration flows have a larger impact than a transit status. Therefore, we have assigned a ⅔ weight to migration flows and a ⅓ weight to transit country status and normalize from 0 to 1.

Criminal links

A final element to be considered in terms of social political tensions is organized crime. This is relevant for the Netherlands given its central role in various types of serious organized crime.[56] To measure the extent of organized crime in the country of origin and its impact on the Netherlands we assess the size of criminal markets and the number of offences committed in the Netherlands. While the literature also points to the fact that other elements jointly determine the relationship between countries of origin and their

54 "Hoeveel immigranten komen naar Nederland?," CBS.

55 "Global corridor," Counter-Trafficking Data Collaborative.

56 Europol, *European Union serious and organised crime threat assessment, A corrupting influence: the infiltration and undermining of Europe's economy and society by organised crime* (Luxembourg: Publications Office of the European Union, 2021).

impact on the Netherlands (e.g. trade flows) we have already used these metrics above. To avoid correlated measurements we rely on two purely 'crime' proxies.

Indicator(s)	Type	Indicator(s)	Source(s)
Criminal links	Quantitative	The 'criminal markets' and the 'criminal actors', Criminality Score of the Global Organized Crime Index *Presently ranging from 1-10, divided by 10 to arrive at 0-1 range.*	Global Initiative[57]
	Quantitative	Quantification of high intensity crime per country of origin (first and second generation)[58] *Normalized at min.-max. values (0-1)*	Police

To arrive at one score, we aggregate both scores and normalize from 0 to 1.

3.6 Indicators for 'International Order and Stability'

Upholding 'International Order' is grounded in the Dutch Constitution and has a long tradition in Dutch foreign policy. While this concept has been commonly conceptualized in a normative fashion (upholding the rules-based system) recent discussions have pointed to the need to include more direct security interests as well. To this end, we add two elements to the index: instability and geopolitical competition. Hence, International Order and Stability is composed of three transmission belts: a) stability – as stability in countries surrounding Europe is important *sui generis*; b) an assessment of geopolitical risks – what does instability mean for the relative role and position of geopolitical adversaries?; c) the impact on international norms and values (as is presently done in impact systems).

Instability

A first element to be measured is instability within countries. There are two potential approaches to this: measuring the underlying drivers of instability (e.g. state fragility) or measuring manifestations of instability, such as violence. We have chosen to use the violence indicator as this is a more direct proxy for instability (consistent across various countries) and because the main drivers of indicators (FSI, WGI etc.) are highly context

57 ENACT, *Organised Crime Index Africa 2019* (2019).

58 The third generation is excluded as this relates more strongly to integration rather than to countries of origin.

dependent. In other words, violence in Belarus is what is often more concerning than whether the President has been legitimately chosen (although these are admittedly related). To measure instability, we use three quantitative indicators: a) HIIK to measure inter-state conflict; b) UCDP to measure intra-state conflict; c) ACLED to measure all other types of political violence.[59]

Indicator(s)	Type	Indicator(s)	Source(s)
Instability on the periphery of Europe	Quantitative	Interstate conflict propensity scale based on the number of conflicts and the intensity of these conflicts. *Normalized at all countries' mix.-max. values (0-1).*[60]	HIIK
	Quantitative	Number of ongoing intra-state conflicts in the country. *Normalized at all countries' min.-max. values (0-1)*	UCDP
	Quantitative	Number of incidents of political violence in a country. *Normalized at all countries' min.-max. values (0-1)*	ACLED

To arrive at one score, we aggregate all scores and normalize from 0 to 1.[61]

Geopolitical Risk

A second element of threats against Dutch interests is the relative position of geopolitical adversaries in countries experiencing instability. As the conflicts in Libya, Ukraine, Georgia and Syria have shown, instability allows geopolitical adversaries to increase their positions. As a result, the Kingdom of the Netherlands and its allies might lose their political influence.

It is relevant to consider these roles independently rather than to consider the ultimate consequences for other Dutch interests (e.g. on societal effects). The reason for this is that geopolitical effects have a long-term horizon before they actually materialize and it

59 Bob Deen, Adája Stoetman and Kars de Bruijne, "From indices to insight – A proposal to enhance the risk assessment of the Dutch Early Warning/Early Action process" (The Hague: The Clingendael Institute, forthcoming September 2021).

60 See for the calculations HCSS, "Method Assessment Framework to Classify and Rank States on their Conflict Risk" (2020), 37.

61 It might be relevant to consider a tier of countries to be generally more relevant. For example, for the Netherlands these would be countries closer to the Netherlands (and its overseas territories). To this end a double weight could be assigned.

is often difficult to assess these effects in present threats. One way to do this is to keep track of shifting degrees of influence.

Indicator(s)	Type	Indicator(s)	Source(s)
Geopolitical positions	Qualitative	Has the country recently experienced a very significant increase of influence among geopolitical adversaries (China, Russia or middle powers such as Turkey, the UEA)? See codebook *Binary variable.*	Manual

Rules-based international system

The third transmission belt is the effect of the country on the international rules-based order. To this end, we consider four 'international regimes': the peacebuilding regime, non-interference, the economic order and the human rights position. Together these approximate whether countries are promoting the international rules-based order. We rely on indicators developed by the HCSS in 2020 and add one indicator that assesses regional security arrangements.

Indicator(s)	Type	Indicator(s)	Source(s)
Non-interference	Quantitative	Interstate military skirmishes.[62] *Normalized 0 to 1 at min-max values*	HIIK
Free Trade	Quantitative	Number of complaints filed against the state at the World Trade Organization. *Normalized 0 to 1 at min.-max. values*	WTO
Human rights	Quantitative	Human rights record, from the Freedom in the World index. *Normalized 0 to 1 at min.-max. values*	Freedom House
Regional Security	Quantitative	Contribution to regional security arrangements measured as troop contributions to regional and international missions (expressed as percentages of total army size) *Normalized 0 to 1 at min.-max. values*	ISSS – military balance

To arrive at one score for threats to the rules-based international system we aggregate all scores and normalize from 0 to 1.

62 See the calculation by the HCSS, "Method Assessment Framework to Classify and Rank States on their Relevance to Dutch National Security Interests Netherlands?" (Unpublished report): 28.

4 Reflections: Interpreting the Clingendael EWEA impact index

To what extent does this index and the accompanying method design actually solve the problems it sets out to solve in the first chapter?[63]

- A first critical point about existing indices was that additional technical developments are needed. While this index significantly improves the selection and calculation of proxies (see section 2.3), it also needs some work. This pertains particularly to ensuring the comparability of scores and the intensification of measurements;
- A second point was that the inherent tension/trade-off concerning impact assessments was not solved/addressed. The index developed in this piece does not solve the trade-off. It still uses proxies that may or may not impact Dutch interests. However, giving it a proper context and clear boundaries as to what can and cannot be achieved with this index has allowed us to include and exclude elements that are better assessed in other stages of the process;
- This index adopts a more international outlook than any of the existing methods. However, its operationalization of allies into (basically) a group of great powers is difficult and requires additional thought. The trade-off is that every new country added requires a massive data collection effort;
- Finally, the method has been specifically tailored to EWEA purposes by considering the effects of various forms of violence and how these might translate. However, so far the index does not clearly relate violence levels to impact. Simply stated, does more violence in country A also mean a stronger impact on the Netherlands? Or even more bluntly, is (more) instability actually more threatening to Dutch interests that (more) stability? This chapter therefore provides advice on index interpretation.

It is feasible to construct the proposed index. An initial database on a few regions and a limited number of variables have been constructed by the MFA. The challenge does not lie in the number of regions but in ensuring data availability and continued quality. Overall, this requires a system linked to APIs to be set up (available for most indices) as well as a precisely designed protocol for updating and adding new data. After an initial effort the resulting database can be well maintained.[64]

63 Thanks to a reviewer for pointing out the need to list the next steps.

64 Clingendael has started to develop these processes internally on the basis of the MFA pilot scheme.

Among future steps are the use of better data, a set of (inter-)departmental validation efforts and, first and foremost, how to interpret the scores. Users may not be fully aware of the intricacies of the underlying data or the calculations and, as a result, sweeping statements are made and conclusions are drawn that cannot be supported by the data. Below we explore some options.

Interpretating compound scores

A first interpretation suggestion is based on a warning that is applicable to a very large number of indices but is seldomly made explicit: *scores cannot be easily compared between categories*.

A common problem concerning quantitative indices is that a reflection on whether scores can be compared is often absent: most do not have indexing methods. Instead, indices simply summarize and aggregate scores. The technical problem is that this leads to biased indicators and a biased interpretation. For example, aggregating min.-max. values can only really work if the data is normally distributed (that means that data is clustered around a mean, e.g. the height of men is on average 171 cm). But if there are variables that are also not normally distributed (and e.g. are clustered at the tails, e.g. there are only males with a height of 150cm and 195 cm), this means that these variables bias the overall scores. This index includes various non-normally distributed variables which means that the scores of a specific 'interest' cannot be compared. A .5 score on military spending is not better or worse than a .4 score on organized crime. Similarly, higher scores on territorial security than ecological security do not mean that there is a greater impact on territorial interests. Only across countries is this possible.

There are various solutions to this problem and these are to be considered in future iterations:

- Express the index in non-parametric terms. This means that rather than just presenting the values, we use the values to create country rankings for each variable (this means, technically, that the interpretation of the distance between scores is no longer relevant – which is a drawback). From the result of ordinal data, one overall ordinal scale could be created that ranks countries. For example, a country that occupies 1st place in terrorism threats, 4th place in threats to trade and 10th and last place in threats to physical security would be given an overall ranking of 5 (depending on other scores);
- A second solution is to develop a system where the scores are left intact but where informed experts (e.g. embassy staff or MFA and MoD personnel) are consulted for interpretation of those results. This could involve a Delphi survey where data results are simply presented unfiltered and subsequently interpreted through a structured series. This could lead to an overall country ranking;
- A third solution is to solve this quantitively by scaling responses vis-à-vis one another. This involves an assessment as to how values for variable 1 compare

to values for variable 2. For example, a score of .5 on military spending might be equivalent to a .7 score on organized crime and a .1 score on a nuclear fallout. With this baseline a scoring system can be generated. A variant is to create ordered variables. This could involve a 1-5 score where the numbers correspond to specific descriptions of impacts on overall interests. On this basis all sub-variables can then be split into these categories and, on the basis of a series of iterations and tests, they can become valid conceptual measures[65];

- A fourth method is to take cut-off points on the basis of threat thresholds.[66] That would involve more binary coding where certain variable levels correspond to a very likely threat. Hence, interests are binary coded (1 threat, 0 non-threat) on the basis of one or more underlying variables. For example, economic interests are threatened (1) when either piracy, the overall importance of the world economy or a relative relation to the Netherlands score beyond a threshold level.

A second point to be considered is whether individual variables, sub-categories and vital interests need to be weighted. For example, the 'rules-based measurement' is presently based on four elements: a contribution to regional peacebuilding, territorial integrity, an open economy and the human rights stance. These are currently weighted equally in the measurement and thus play a large role in the overall 'international order' interest. At a higher level, ecological interests can weigh as heavily as territorial or physical interests. Experimentation within the methodology group of the ANV as well as in the Clingendael Strategic Monitor has revealed that weights do not ultimately alter interpretations fundamentally (which is in part because many variables are included). Moreover, these weights are often part of a political discussion and cannot be set in stone. Consequently, for technical reasons it does not seem to be necessary to invest in very specific weighting systems.

Linking variations in violence to their impact on the Netherlands

If anything, our focus on transmission belts is meant to show that simple relations between the effects of increased instability and violence on vital interests cannot be presumed. In certain cases, more violence might be paradoxically promoting Dutch interests (e.g. as it reverses economic growth, limits CO_2 emissions, handicaps the ability of governments to use military means elsewhere, decreases the ability of armed actors to transport illicit goods, or decreases zoonotic transmissions) and less violence might actually be threatening (e.g. as it allows crime to grow within the fold of a functioning state – Mexico, Russia and North Korea, being good examples).

65 Thanks to a reviewer for pointing to this solution.

66 See the HCSS method where a similar process is proposed. Threshold levels could be better validated.

What is thus needed is targeted and serious research into what types of violence, conflict and instability actually impact the various transmission belts identified in this index. Interpreting this index should thus be accompanied by an explicit consideration that various forms of violence impact Dutch security but in ways that are not monocausal and are very complex. It requires an explicit analysis, not a mere reading of variable levels.

To help in this, we end with a preliminary interpretation matrix. The matrix shows on the left vertical axis the various types of transmission belts ranging from direct military threats to the Netherlands to threats, via pandemic risks and piracy, to the rules-based order. On the horizontal side three types of violence are presented. The various boxes finally present three options: a) a negative relationship where more violence means greater threats; b) a positive relationship where more violence means fewer threats and, finally; c) an unclear relationship where more violence may or may not lead to a threat to Dutch vital interests. Any contradictory impact of violence has been scored as an 'unclear' relationship.

The index is based on the limited available literature (see above) and brainstorming sessions within the security unit of Clingendael and is meant to be a starting point in a conversation rather than a definitive endpoint.

Figure 3 The complex relationship between the manifestation of political violence and its impact

Vital Interest	Transport Belt	Inter-state conflict	Intra-state conflict	Other violence
Territorial Security	Inter-state military threat to NL	•	•	•
	Inter-state military threat to Allies	•	•	•
	International Position NL	•	•	-
	International Position Allies	•	•	-
	Terrorist safe havens (expansionist)	•	-	-
Physical Security	Harm to citizens of the Kingdom	-	-	-
	Harm to Ally citizens	-	-	-
	Pandemic Risk	•	•	•
	Nuclear Facility	-	-	•
Economic Security	Dutch trading partners	-	-	•
	Overall Importance in World Economy	-	-	-
	Piracy	-	-	-
Ecological Security	Climate Change	+	+	•
Socio Policitcal Security	Social links (various applica-tions)	-	-	-
	Harm to democratic institutions	•	•	•
	Migration	-	-	-
	Crime	•	•	•
International Order & Stability	Rules-based system	-	-	-
	Instability	-	-	-
	Geopolitical risks	-	-	•

"-" = Negative impact
"+"= Positive impact
"•" = Context Dependent (can go both directions)

Annex 1: Codebook

Variables	#	Definition	Indication	Sources
Intention to undermine Dutch territorial interests	0	No intention to undermine Dutch territorial interests	No evidence from strategy documents, verbal statements or well-reasoned analysis suggesting territorial threats to the Netherlands (or the EU)	Strategy document, Verbal statement by politicians, analyses in authoritative outlets
	0.5	Some indications that seek to undermine territorial interests / unclear	Strategy documents, verbal statements or well-reasoned analysis suggesting including some mention of territorial threats to the Netherlands (or the EU) but with contradictory information	
	1	Substantial evidence or explicit strategy to harm Dutch territorial interests	Strategy documents, verbal statements or well-reasoned analysis suggesting that there are military threats to the Netherlands (or the EU)	
Risk of territorially-based caliphate	0	No desire to establish a caliphate	No evidence and no clear statements	Al Naba, analyses in authoritative outlets
	1	Desire to establish a caliphate or a caliphate already in place	Explicit statements in publications such as Al Naba or analysis suggesting that specific groups have territorial ambitions. Clear indications that groups are associated with the IS network, which unlike Al Qaeda seeks a clear territorial base;	
Geopolitical Positions	0	No recent changes	The country has not recently changed its alliance towards China or Russia or Middle Powers (e.g. Turkey, the Emirates), nor seen a major increase in or improved relations with any of these countries	Analyses in authoritative outlets
	0.5	Various example of geopolitical interference from great and middle powers and some indications of closer relationships therewith	Troop presence, military support, training, major increase in aid and development projects, increasing investments and new contracts. Verbal support for the regime by senior state officials from China or Russia or Middle Powers (e.g. Turkey, the Emirates)	
	1	Increased involvement of great or middle powers and indisputable changes to the alliances and attachments of the regime		