Conflict Prognostication:
Toward a Tentative Framework
For Conflict Assessment

Revised Version

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This report is part of the project on Conflict Research as conducted by The Netherlands Institute of International Relations 'Clingendael' on request of the Netherlands Ministry of Foreign Affairs. In an attempt to develop an integrated framework for assessing intra-state conflict potential and policy responses, this report on conflict prognostication is a first stocktaking of the international efforts that have been undertaken at anticipating and preventing the outbreak of violent conflict.

I. Research Questions and Methodological Approach

The objective of this study on conflict prognostication is the development of a framework for standardized early warning (conflict assessment) analysis to help structure the usual reporting from desk officers and field personnel, in order to enhance the capacity to identify and prioritize options for operational responses. The ambitions of the framework therefore are to understand by looking at conditions, to predict by recognizing patterns of events and actions leading to potential crisis, and to indicate potential points for intervention.

Relevance of the research effort

Skepticism about the effort of developing early warning systems is often based on the argument that enough warnings are sent out already. There is a general feeling that "we already know what the causes of conflict are" and that "we know the indicators to monitor". The discussion then shifts to political indecisiveness to respond. However, as the Clingendael research on Causes of Conflict in the Third World has clearly demonstrated, the generally assumed causal relationships in the chain of conflict are not that clear-cut. Indicator-analysis therefore needs to be reviewed and evaluated on its effectiveness. Policy-making and intervention in potential conflict situations that is based on *false* analysis can sometimes be more costly, even more detrimental, than doing nothing at all. Hence, for any framework to be effective, adequate analysis is imperative.

There is however little consensus in the field as to what constitutes best practice in early warning and response development. Theoreticians as well as practitioners differ on objectives, indicators, sources, and practical methodology for early warning. Knowledge on effective responses and conflict prevention instruments is even less developed. Although the research efforts are of recent date, and no conflict early warning system is operational yet in a policy setting, we can draw on some significant findings from the efforts undertaken by academics and practitioners. These findings are our point of departure for the development of a tentative framework for assessing conflict-prone situations.

Questions for research

The central research questions may be identified at various levels:

- *Conceptual level*: what are the key concepts and issues in conflict prognostication; which dimensions can be discerned in a conflict prognostication model; which methodological

issues are involved; what are the contextual preconditions for practical use of the models; what methodological approach will be most suitable to be used in a policy context?

- *Theoretic-prognostication level*: what efforts at theoretic modeling for risk assessment and early warning are undertaken; what indicators and methodology are used; what can be learned from the strengths and limitations of these models for our own framework; which indicators should be included in the framework for monitoring in a policy context?
- *Operational level*: what is the policy relevance of the theoretical models; what efforts are undertaken to address the issue of conflict prognostication and prevention in a policy context; what can we derive from these findings; can we identify projects or findings on which to build our own framework; what are the essential elements, preconditions and characteristics of the framework for operational use?

The observation that three different levels are involved in the development of a framework for standardized conflict assessment implies that conflict prevention in itself can be approached in various ways. First there is the theoretical concern of predictability, that has to address issues of reliability and validity of early warnings and risk assessments. Second, conflict prevention as an action science is concerned with practical feasibility and possibilities to take actions. Here, practical (operational considerations, efficacy and efficiency of response, international consensus) as well as normative matters (political will, national interest) are involved. Third, from a political stance, conflict prevention is concerned with desirability (principles of sovereignty, non-interference).[1]

Hence, when the ultimate objective is the development of a framework to be used in a policy setting, this means that we have to broaden the theoretical debate on causes of conflict and prognostication to include issues of practical feasibility and possibility to take action as well. In this regard, it is of key necessity to clearly and realistically define the "field of application", i.e. the objective of the framework. This implies the necessity for a needs-assessment of the relevant policy context, in order to come to clarity of mission.

II. The Conceptual Dimensions of a Conflict Prognostication Model

Conflict prevention, early warning, early response and conflict prognostication

Conflict prevention has become a high-ranking item on the current international agenda. Nonetheless, no consensus exists on what exactly are (or should be) preventive actions, or what may be expected from an early warning system. In this report we will focus on the methodological and practical implications of these concepts. Whereas early warning is concerned with the reliability and validity of the system, early action should address questions with regard to how to effectively mobilize governments and organizations, how to create political will, as well as how to create institutional and policy frameworks to be ready to react. The intermediate level between the two is found in prognostication and the modeling effort, by providing the prerequisites for persuasion: analytically derived warnings to evaluate reliability, made publicly available to provide the basis for a broad-based discussion and collaborative decision-making.[2] Conflict prognostication, then, has to deal with measures of decision-making by reducing misperceptions, improving conflict management and analytical

[1] For an in-depth study on the dilemmas involved, see K. van Walraven (1998) *Early Warning and Conflict Prevention: Limitations and Possibilities*, The Netherlands Institute of International Relations 'Clingendael'.

[2] Exact prerequisites of a warning and its capacities for persuasion depend on the target user, and the context for which the model is being developed. Hence, an early warning directed at influencing public opinion considerably differs from an 'internally' provided warning within an organizational structure.

skills of decision-makers, and providing specialized and real-time information. Moreover, it may give us a better chance at understanding the dynamics of conflicts. An improved capacity to know about and correctly interpret events early would improve the quality of responses that are brought eventually to bear.[3] In this way, an accurate assessment procedure may help to rationalize the use of scarce resources available to distinguish which places are most in need of urgent attention and when, and to single out cases where conflict prevention still is a realistic option.

A conflict prognostication model and its dimensions

Conflict prognostication here comprises the effort of assessing risks (the conflict potential within a country) and early warnings of conflict escalation, and can be seen as a continuation of research on the causes of conflict. When speaking of a model, we mean the identification of a clear set of indicators that can be analyzed within a pre-specified framework, which should provide us with an assessment of the conflict potential and the chances of escalation into violent conflict. The limitations of such a model should however be recognized. In conflicts we are dealing with complex, open and dynamic systems in the absence of deterministic causality. Hence, anticipating possible conflicts is not a matter of precisely predicting specific events and their timing. This level of exactitude is not possible. Instead, early warning means judging the probability that certain events will lead to violence or other crises. Various approaches may be adopted in the development of such a model. The main dimensions are indicated in figure 1.

DIMENSIONS OF A CONFLICT PROGNOSTICATION MODEL		
Aim	What is the objective of the model? Is it to give a description of the situation, or should it anticipate the conflict? Should the model provide an explanation of the how and why of the situation or is apprehension sufficient?	▪ Descriptive ▪ Explanatory ▪ Apprehension ▪ Anticipation
Target user	Warnings can be provided internally within an organization/government, and hence be tailored to its context and usage. Others are provided externally, and have to convince the political/practitioners' field in an indirect way (e.g. through public opinion).	▪ Internal ▪ Indirect
Level of analysis	For what level of analysis does the model hold value?	▪ Group ▪ National ▪ International
Dependent variable	What "type" of conflict is the conflict prognostication model developed for (see also generic-specific)?	▪ Intrastate ▪ Interstate ▪ Causal typology
Independent variables	How good are the chosen indicators? Are they indicative for causality? Are they operational?	▪ Choice on indicators
Intensity of conflict	Should we look at the level of conflict in actions to see whether conflict is intensifying, or can we discern specific indicators of intensity (e.g. number of deaths, military expenditure).	▪ Conflict-cooperation scale ▪ Indicators on intensity
Weighting of indicators	How do we decide on the significance of specific indicators?	▪ Quantitative ▪ Relative
Qualitative-quantitative	Data may be qualitative or quantitative. The methodology could be statistical or more narrative.	▪ Data ▪ Methodology/model

[3] These include preventive measures dealing with conflict –to avoid the development of contentious issues and goal incompatibilities, remove sources of conflict, resolution of conflict– and preventive measures dealing with the opportunity structure –with power available to parties, and factors that constrain or allow the use of power (Reychler, 1994).

Data	Not for all indicators data are available. And if so, it should be taken into consideration if they are reliable.	▪ Availability ▪ Reliability
Processing	Defining parameters is a subjective and arbitrary judgement. It is also highly dependent on the quality of data, its availability, reliability, and the interpretation of data (consistency of coding).	▪ Coding (human – automatic)[4] ▪ Objectivity –subjectivity ▪ Real-time –near-real time[5] ▪ Reliability and validity
Coverage[6]	Generic indicator research can furnish the necessary comparative breadth needed for understanding similar structural components of crises, while specific case studies fill in the blanks with case-specific information. Focus on uniqueness is in particular significant when formulating response. Analytical results should be interpreted at two distinct levels: as reference to model of general understanding of conflict process, and as reference to the political and social context in which processes are grounded.	▪ Generic ▪ Specific
Timing of warning	How far in advance should we be warned on impending conflict? Do we focus on structural conditions or on process dynamics? What phases of conflict may be discerned?	▪ Risk assessment[7] ▪ Early warning ▪ Static-dynamic

Figure 1: Dimensions of conflict prognostication models.

III. Theoretic Models of Conflict Prognostication

Although early warning systems already exist in other fields (e.g. natural disasters, agriculture and food, health, meteorology)[8], early warning models on conflict differ insofar that the phenomenon to be warned upon involves –at least to a larger degree than in other fields– human decisions, thoughts, and behavior. This puts additional demands and constraints on the modeling effort. There are also early warning systems on the *consequences* of conflict (e.g. refugees, food shortage). These, however, are mainly directed at preparing for humanitarian emergency responses. Obviously, their approach differs significantly from the attempt to prevent violent outbreak or anticipate the escalation of conflict.

A typology on analytical approaches[9]

There are several types of analysis currently in use.[10] Included in this typology are models that search for a more standardized approach to conflicts, i.e. a search for a methodology and indicators, and only in an indirect way includes the theoretic or empirical search for causes of conflict. The description of the approaches that will follow, it should be realized, is ideal-

[4] There is a methodological discussion on the accuracy of automatic coding in comparison to human coding. Bond and Rothkin (1995) claim that, when human and machine-coded data are used in statistical tests, the results are almost indistinguishable except for differences due to the higher number of events in the machine-coded data.

[5] For our purpose, real-time is interpreted as a "forecasting device", focusing on events as they happen. Near-real time is interpreted as including more general information, and models that are often operating with hindsight.

[6] There is a clear trade-off between the analytic power, generalizability, and predictive value of parsimonious theories, and the descriptive richness of more complex theories (Levy 1994; Adelman and Schmeidl 1996; Doom and Vlassenroot 1995; Gurr 1997).

[7] For our purpose, we will use the concept of risk assessment as being based on systematic analysis of remote and intermediate conditions. Conversely, early warnings are assessments of events that, in a high risk environment, are likely to accelerate or trigger rapid escalation of conflict.

[8] See e.g. several "Disaster Databases" on the internet.

[9] See appendix 1 for a detailed description of the separate models for conflict prognostication.

[10] This typology was taken from *The Journal of Ethno-Development* 4(1), a special issue on Early Warning of Communal Conflicts and Humanitarian Crises, edited by Ted Robert Gurr and Barbara Harff (1994).

typical in nature. The current state of development of the models is not yet to the degree that we can draw sound conclusions from the analysis. Rather, the typology of models here presented is first of all a description of their intended future potential as a model for conflict prognostication.

A first approach focuses on structural indicators and causality, arguing that, in order to come to valid and reliable early warnings, a lot more attention is needed to identify the connections among conflict phenomena. Gurr's risk assessment model for communal conflict (related to the Minorities at Risk Project) is exemplary for this causal, or *correlation model* of conditions, and also the State Failure Project is an extensive statistical effort in finding correlation between conflict factors. Testing the strength of postulated sets of causal relations among variables can however only be done with hindsight. Nevertheless, by identifying the relative weight of structural indicators, we may start to understand why conflicts occur.

To move from these long-term risk assessments to shorter-term early warnings, a model is suggested to study in what sequences these phenomena have most commonly occurred in the past. This *sequential model* tries to track more precisely when tense and high-risk situations – as indicated by structural conditions– are likely to erupt into crisis, thus adding time-sensitivity to risk assessments. So-called accelerators are analyzed with the aim of enabling us to trace the flow and sequence of events that can trigger a conflict. Here, a clear distinction is made between background conditions, intervening conditions and accelerators, the logic being that "...if most of the background and intervening conditions are present in a crisis situation, the occurrence of accelerating events are likely to worsen the situation" (Gurr and Harff, 1994: 5). The model, then, is well suited to tracking crisis situations as they evolve over time, and enables to assess the likelihood that particular events will (not) lead to conflict.

	INSTITUTION AND/OR RESEARCHERS	TIMING	TYPE OF CONFLICT	AIM	APPROACH	COMBINATIONS OF EFFORTS
Minorities at Risk (MAR)	CIDCM Gurr	Risk assessment Structural model	Communal (ethno-political)	Explanation Causality	Quantitative	Linkage to accelerator approach
PIOOM	Jongman, Schmid	Risk assessment Structural model	Human rights violations	Monitoring	Quantitative Qualitative	Integration MAR
State Failure Project	Esty, Goldstone, Gurr, Surko, Unger	Risk assessment Structural model	State failure, generic	Explanation Causality	Quantitative	Integration MAR and accelerator approach
Accelerators of genocide	CIDCM Harff	Accelerators Dynamic model	Genocide and politicide	Anticipation, sequential	Quantitative	Linkage to MAR and uses data event system
LIVA	Fein	Response Dynamic model	Genocide and politicide	Apprehension	Qualitative	-
CEWP	Brecke	Structural and triggers Dynamic model	Generic	Anticipation, conjunctural	Quantitative	Uses data event systems
Cluster analysis	Schrodt, Gerner	Triggers Dynamic model	Generic	Anticipation, conjunctural	Quantitative	Uses data event systems
PANDA	Bond	Triggers Dynamic model	Generic	Anticipation, conjunctural	Quantitative	Uses data event systems

Figure 2.: Overview of theoretical conflict prognostication models and their dimensions.

A third type of model focuses on inductive methods and, while analyzing dynamic events, searches for more complex patterns or thresholds. The *conjunctural model* thus specifies alternative sequences or scenario's of events, and posits combinations of conditions. Exemplary of this type of models is the pattern-matching approach of Brecke (1998), the clusters of Schrodt and Gerner (1998), and the PANDA project of Bond (1997; 1998). Here, the aim of the model clearly differs from the previous two (understanding the why and how of

conflict escalation), by focusing on the intensification of the conflictual situation. These data event-related approaches are strongly dependent on media coverage. Deliberate concealment of events or lack of interest by the media will influence the findings of the approach.

A somewhat contrasting approach to the development of explanatory-predictive models is by emphasizing how these models are put to policy use, irrespective of testing, in order to anticipate on alternative responses. The approach is significant in the attempt to come to policy-useful or "consumer-driven" early warning models. The *response model,* then, tries to identify the points in the conflict process in which strategic interventions are likely to make a difference in outcome. While built on the findings of sequential analysis that identify the sequence of causal conditions and events that lead to violations, the model then specifies responses that might deflect or mitigate effects.

This approach differs from the others by putting into perspective the necessity and value of extensive testing of the model and its methodology. The logic behind it is that, in order to demonstrate the value of the early warning system you should not test the model, but rather evaluate the response to the intervention, since the model is part of an interactive system that is emerging dynamically from warning and response. Hence, "...the objective of an EWS is to disconfirm expectations by the interventions or interactions it triggers." (Fein, 1994: 32) To stress the fact that hers is not an extensively tested model, Fein speaks of a "good-enough model". As the name suggests, it is not the best model for explanation, but it is a simple model for apprehension, with the aim to specify preconditions and present responses at pressure points. Cause-effect relationships need to be identified to such an extent for the user to be confident that a given policy activity will likely reinforce or offset any given combination of factors.[11] In order to intervene effectively, the importance of good analysis remains.

Methodology and the aim of the model

Clearly, the models differ in the methodology used, which is a reflection of their objective. Some models aim at a better understanding of conflict, and focus on the causal relations between various variables, and the relative weight of each. The main focus, then, is on underlying causes of conflict. Others aim at coming from risk assessments to early warnings by focusing on sequences of events, in an attempt to foresee when a conflict is to erupt. A third approach links the warning to response, by identifying points in the crisis where intervention makes a difference, and specifying responses. A fourth approach to the early warning modeling effort is concerned with the process and intensity, with directionality. It is a search for patterns and thresholds. This can be done by looking at changing structural conditions or by focusing on the level of conflict and cooperation in the actions and reactions of various parties.

As regards the distinction between long/medium-term and short-term conflict prevention, timing is an important dimension of the models. Some models focus on 'real time' events, and leave the causes of conflict as less significant for the short term. Others focus specifically on these causes, and hence on the longer term. The various approaches to conflict prognostication, then, clearly demonstrate the importance of analyzing conflict potential in the light of stages of conflict. Conflict should be approached as a process and not just by its causes. Whereas it sometimes appears that "anything may lead to conflict", other questions come to the fore: why does a situation become critically conflictual at a certain point, how are the conflicting issues being dealt with, and what choices were important in the process of

[11] See also Bloomfield and Moulton (1997).

escalation? Which actors can be identified in the conflict, and what are their aims, motivations and interests?

Methodology and the choice on indicators

Methodological decisions also have consequences for the choice on indicators, and vice versa. Nevertheless, the issue of what indicators should be included in a theoretical prognostication model is not a heavily debated one in the literature on early warning.[12] In general we could say that the variance in indicators used in the model depend on:

- Conflict-theoretical considerations: what are considered to be categories that hold key explanatory power (political, economic, cultural, social, environmental, etc.)? Should indicators be a reflection of the causes of conflict, or of the consequences of conflict? In this regard, what theoretical assumptions are made with regard to the causes and consequences of conflict?[13]
- Methodological considerations: are/should the indicators be quantitatively or qualitatively designed? How many indicators are included (complexity versus simplicity of model)? Are the data automatically processed (human versus automatic coding; database trend-analysis; data event systems; computerized pattern recognition)?

Probably the key distinction in indicator choice and methodological choice is between structural background conditions and dynamic conditions (proximate, intervening, accelerators, signals, thresholds, triggers, etc.). Hence, there are 'static' or structural models that focus on underlying conditions of why people decide to mobilize and take violent action (and use indicators on perceptions, underlying structures, strains, and discontent). Dynamic models, on the other hand, focus on actual behavior, central political processes, and specific claims and counterclaims being made on the government by various mobilized groups. The most appropriate approach would however be a combination of the two.

Many theoretic models focus on a specific type of conflict (ethnic, communal, geno-politicide, state failure, human rights violations), claiming that different types of conflict have different causes, and they select indicators on this ground. However, we should realize that the typology according to causes hold many weaknesses, because the complexity and dynamics are hardly ever mono-causal. In the course of time, conflicts may center on successive issues, or may co-occur. This aspect is especially important from a policy point of view, as it affects the type of intervention and the timing thereof.

On the basis of the theoretical conflict prognostication efforts, we cannot be conclusive on the choice of (single and combinations of) indicators, neither on the validity of including them in the model, nor with regard to reliability.[14] However, when the objective of a framework and the mission are clearly defined, and when policy and response capacity assessments are included, then more explicit suggestions could be made with regard to the choice on indicators.[15] Structural background indicators, for example provide valuable information for the design and assessment of structural policy measures to prevent conflict. Dynamic models

[12] This discussion mainly takes place in theories on the causes of conflict, which are of course partly reflected in the models.

[13] E.g. is state failure a consequence, or rather a cause of ethnic conflict?

[14] Near-real time models can only decide on the significance of indicators with hindsight, by distinguishing conflict-cases from control cases.

[15] The choice on indicators is a reflection of various choices on the dimensions (see figure 1). It is in this regard that the variance in the models is found.

and near-term trigger indicators, on the other hand, will be more suitable for operational conflict prevention. But even then reference should be made to structural tensions in order not to lose important contextual elements.

Quantitative and qualitative research techniques

The majority of the models for theoretical conflict prognostication has adopted a quantitative approach and applies statistical techniques for testing its validity and reliability. In this regard, the research on assessing conflict potential is clearly making progress.[16] However, what is still little understood is why some countries at high risk of conflict escalation do *not* turn violent.[17] In an attempt to address the issue, quantitative theoreticians have also included decelerators or conflict-inhibiting factors in their analyses. The results on identifying these "de-accelerators" are not satisfying so far. In this regard, a qualitative approach may seem more suitable. Case-specific studies on lessons learned and missed opportunities are expected to hold valuable information.

Validity of theoretical conflict prognostication models

Since the models are not (yet) operational as forecasting device, we can only to a limited extent comment on the validity of their predicting capacities. Theoreticians are modest in their statements on the models' validity and accuracy, since they are still in a developmental phase. The main efforts include the development of a methodology, the timeliness of the warnings, and the input of data. One further issue is of relevance here. In particular since many models are quantitative in nature and use statistical techniques, the quality and availability of data is of key importance. In this regard, there is a compelling need to improve global and regional data on key dimensions of social, economic, political and environmental conditions. In case one chooses to adopt a quantitative approach in the framework for assessing conflict potential, the decisive criterion for inclusion of particular indicators is not only their predictive capacities (i.e. how relevant and salient are the situations and events observed?), but also whether and to what extent these can be made operational in real life conditions (i.e. is it possible to regularly and reliably monitor the range of indicators?).[18]

Reliability of theoretical prognostication models

The reliability of the theoretic models is strongly related to their eventual use and objective. Many quantitative models aim at understanding how and why conflicts occur, and try to identify the key indicators that may function as signals for impending crisis. Since these models are efforts at enhancing their explanatory capabilities, strong emphasis is put on testing (validity). However, as Fein (1994) argues convincingly, the aim of explanation is quite different from the aim to predict and/or prevent conflict escalation, and "[t]he qualities required for a social-scientific model to explain [which is a *post*dictive function] differ from

[16] Some are more skeptical, however. Baker (1998: 8), for example, argues that "[s]tudies that rely exclusively on quantitative techniques fail to capture key variables that are not subject to statistical verification. They often oversimplify complex situations, lack the texture of 'ground truth' in countries at risk, and do not provide an overall analytical framework."

[17] Zartman (in George and Holl, 1997: 11): "The biggest problem in the early warning debate is not whether an event is preceded by warning signals but whether warning signals are followed by an event. There are many more prior indications than there are ensuing events; many warning signals simply fizzle and seemingly impending events work themselves out…"

[18] J. Dedring (1992) "Socio-Political Indicators for Early Warning Purposes", in K. Rupesinghe, M. Kuroda (eds.) *Early Warning and Conflict Resolution*, New York: St. Martin's Press, pp. 194-214.

that needed to anticipate and apprehend".[19] We therefore have to turn to the policy setting to decide on the reliability of the theoretic models of conflict prognostication.

IV. Policy Relevance of Theoretic Models of Conflict Prognostication

Generally, theoretical quantitative models aim at tracing patterns, finding regularities, and discovering meaningful relations in the broad variety of independent variables. Dynamic approaches can help identify particular stages of conflict, trying to come close to identifying factors that are critical in moving conflict along a predictable path.

Theoreticians, as well as policy and decision-makers that are expected to respond on warnings, generally fear false positives and false negatives. Given the already high number of warning signals, a "cry wolf phenomenon" may result in loss of credibility and non-action. The theoretic models, then, may contribute by increasing the reliability of the warnings, presenting them in a structured form to decision-makers, and providing a theoretic base for monitoring indicators. When theoretical models are capable of offering this, they can provide in the need for a filter to assess which country situations need extensive monitoring at present. At the moment, this is not yet the case, and hence some reservations need to be made with regard to the reliability of theoretic prognostication models.

Aside from increasing reliability of warnings, the policy relevance of theoretic conflict prognostication models also depends on their input at the response side. Indeed, insight in how and why there is a potential for conflict escalation should be converted in the formulation of concrete ideas on how to respond at the operational level. A better understanding and anticipating capacity could lead to better preparedness and better-founded choices on how to react in case of an intensification of conflict potential. However, also here some reservations seem to be called for, because many more considerations are involved (e.g. clear specification of aim, clarity of mission, possibilities, consequences of intervention, practical feasibility and desirability). Theoretic models do not address these issues. Moreover, increase in our understanding of the causes of conflict and the dynamics of conflict escalation has not been the particular contribution of conflict prognostication models. In this regard, we should point out the significant insights obtained from the academic development of theories on conflict, and the more recent effort of empirical research on the causes of conflict, as conducted by the Clingendael Institute. Qualitative research efforts on lessons learned and missed opportunities are deemed to hold high potential for gaining a better understanding on the dynamics of conflict in relation to response capacity.

In general, we may conclude that –although the effort of theoretic conflict prognostication and the separate models that are currently being developed and tested have great value in itself – the contribution of theoretic conflict prognostication for use in a policy context mainly lies in the fact that it has corroborated the value of standardized indicator-based monitoring. More precise risk assessments and theoretically guided monitoring can provide a greater degree of certainty about impending conflicts, and conversely, help identify those factors most successful in defusing a crisis. Although context and conflict-specific application will definitely add to the analytical precision of the conflict assessment, the framework may be generic in nature, as long as the chosen indicators are in line with the objective and field of application of the main users of the framework. And, since the objective of our framework is

[19] Nevertheless, the two can never be completely separated, since anticipation and apprehension need to be based on expectations/probabilities, which again have to be based on previous explanatory research activities.

to prevent conflicts from escalating into violence, we should aim for apprehension rather than a scientific model to explain. Hence we aim at *response-oriented warnings*, rather than at testing its explanatory power.

V. Practical Efforts of Early Warning Modeling in a Policy Setting

It may well be so that theoretic modeling efforts have contributed to identifying theoretically based indicator categories for monitoring and analysis, but more is needed.[20] The framework needs to be fine-tuned for operational use and as input for policy development. Policy-relevance, then, implies that the presentation calls for an explicit consumer orientation, and should be in line with the needs and expectations of the end-user. The effort of so-called early warning modeling in a policy setting, then, differs from the theoretical effort in being explicitly consumer- and response-oriented. Nevertheless, findings from the latter one have been integrated in the existing policy initiatives.

We have approached the concept of conflict prevention as an integrated effort at anticipating the outbreak of conflict, and acting upon a warning of high-risk conflict escalation. With regard to the latter, we however have to limit ourselves to addressing the question of *what* intervention is possible and preferable at *what moment in time* in the conflict life cycle. It is another issue whether it is politically feasible and desirable for policy-makers to act upon this information. This involves policy and political decisions at various levels, and serving different goals. Clearly, this is *not* the field of researchers, and therefore we will not touch upon this issue.

Although no policy-useful model is operational yet, several efforts have been undertaken in the operational policy context. Again, the initiatives strongly differ with regard to aim, coverage, extensiveness, methods, and indicators. Several categories may be discerned.[21] A first effort is putting the theoretic models into practice as early warning systems in the operational context. The only effort that is said to have been successful to some extent, is the UN-Humanitarian Early Warning System (HEWS). However, rather than providing a conflict assessment framework for use in a policy context, HEWS provides background reports and analyses of present and developing situations[22], based on an extensive database information system. Contrary to this effort of developing early warning capacity at the international (UN) level, others have tried to do the same for input at the governmental (e.g. BMZ-Germany, State Failure Project-United States) or NGO (e.g. FEWER) level. Again others have attempted to provide general guidelines for any practitioner (Fund for Peace). Another way of approaching the issue of early warning and early response is chosen by the Carnegie Commission on Preventing Deadly Conflict, by trying to raise and influence international awareness and political will. And in order to increase the exchange of information between academics and practitioners, Early Warning Networks have been established (EWNET, FEWER).

[20] Baker (1998: 8): "…none have created a generic model that decision-makers, international organizations and humanitarian organizations may use to anticipate and assess the course of such conflicts." She identifies the problems and limitations of existing work as too general, lacking policy-relevance, verifying the obvious or being of limited practical use.

[21] The initiatives are presented separately in appendix 2.

[22] In order to identify crises with humanitarian implications (Ahmed and Kassinis, 1998).

In the above-mentioned undertakings, two central efforts stand out:

- how to monitor, analyze and interpret events in conflict-prone situations
- how to respond in a proactive and reactive way to these conflict-prone situations

The first issue of assessment is in line with the theoretic efforts at conflict prognostication, as described above. Here, however, specific issues are of concern that have to do with choices on how to assign importance ("weight") to specific events, issues of "design" of the framework, and operational considerations. Of quite recent date are some efforts in developing operational guidelines to early warnings (BMZ, Fund for Peace, FEWER). Again, these mainly address questions of identifying conflict potential. Their significance, however, is found in standardization, the development of a standard framework on how to discuss the issues involved, and a selection of factors that should be taken into consideration in the evaluation/assessment. Conversely, the response capacity side is hardly addressed in these frameworks, and they are limited to summing-up and categorizing various response-options.

	TARGET-USER	FOCUS	APPROACH	OPERATIONAL
ORCI	International	Warning	Quantitative	Effort abolished
HEWS	International, UN	Assessment	Quantitative/ Qualitative	Provides country reports, 100+ indicators in database
Fund for Peace	Generic	Warning	Qualitative	Framework and guidelines in development
BMZ-Germany	Governmental	Assessment	Quantitative/ Qualitative	Framework in development
State Failure Project	Governmental	Warning and policy advice	Quantitative	In development, general policy recommendations
Canada Peacekeeping Initiative	Governmental	Response capacity	Qualitative	Statement on intentions
FAST-Switzerland	Governmental	Warning	Quantitative/ Qualitative	In development, pilot study
FEWER	NGO	Warning and network	Qualitative	In development

Figure 3.: Overview of practical efforts of early warning modeling in a policy setting.

Also with regard to the second issue, research has been undertaken in an attempt to address the gap between warning and response. A number of governments and international organizations has expressed the explicit intention to address the issue, and talk about early warning and response capacity, conflict impact assessments, proactive conflict prevention, peace-building, rapid reaction force, stand-by arrangements, etc. In particular the work of Lund on policy tools is worth mentioning here. In an attempt to analyze the knowledge gap on the response side, he examines the strengths and weaknesses of the available policy tools in various conflict situations. Assessments, then, should be made on (a) the effectiveness of individual policy measures under differing generic conditions, (b) the combinations of policy tools (in tandem and in sequence) that are most effective, and (c) the timing and sequencing of third-party preventive actions. Nevertheless, more research is needed with regard to this prospective policy analysis, lessons learned and missed opportunities, and the impact and efficacy of sometimes "standard" responses and policies on conflict potential.[23] In this regard,

[23] Phase II of the CODW research project of Clingendael held several policy recommendations with regard to the external dimension: Whereas political and economic interference with internal affairs of developing countries are considered to be a regular feature of international relations, the effects of these interventions are not fully realized. In particular when direct intervention to the support of one side of the conflicting parties is involved, this may affect the duration and intensity of conflict. But also when intervention is placed in the broader

it is also necessary to deepen our understanding of the role that various actors (or 'political entrepreneurs') play in conflict situations. Some may benefit from the continuation of conflict. If one does not take this into account, standard responses could play into their hands and prolong the duration of the conflict.

In general, we may conclude that, methodologically, multiple models can be identified, as a consequence of the diversity in types of crises to be anticipated, the purpose of the study, and the sources and analytical skills available to theoreticians and practitioners. At the operational level, this is the result of the variety in needs, goals, and capacities of operational agencies requiring early warnings, and in the political contexts within which the crises and responses occur (case-specificity). Hence, when we aim at developing a framework for conflict assessment it is important to take these issues into consideration. This means that we should look at *strategic targeting:* what are the organizations responsible for acting on early warning analysis, and with the capacity to implement rapid responses; and what are the policy frameworks and bureaucratic mandates by which such decisions are made? Second, we should look at the *process link:* what are the operational mechanisms, and their resource constraints, which correspond to each organization's policy frameworks and mandates; and by what process and in what format should early warning analysis be disseminated to these operational actors?[24]

VI. A Tentative Framework for Assessing Conflict-prone Situations

As was already shortly commented upon while setting out the research questions and the methodological approach, the basic assumption of the framework to be developed is that it should address *intra-state conflicts*, and that it should be operational in a *policy context* at the *governmental level.* The methodological set-up of the framework should be an expression of what is thought to be the eventual use. It should provide the basis for a better understanding of the situation, of the causes of conflict, as well as of what should be achieved, and what it takes to achieve the goals set. This should make decision-making more rational and effective. The framework then is a tool that can be used for:

- defining the mission
- situation analysis; guidance for systematic monitoring of changing country situations
- identifying tasks that need to be accomplished in an operation
- identifying options based on the "policy tools" available
- way to formalize communication

Various approaches may be open in the development of this framework. To increase its efficacy, clear decisions need to be taken on its objective, and choices have to be made with regard to methodological and theoretical options.

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perspective of development cooperation, trade, and macro-economics, the effects should be studied more closely to reveal the resulting dynamics of socioeconomic change in recipient societies.

Lund (1998) as well argues that development aid often operates in a routine way, as if one size fits all: "At best, this traditional approach can miss opportunities to head off conflicts by failing to target the particular factors and dynamics that can produce violence". And, worst of all, well-intentioned programs sometimes seem to contribute to serious harm. Programs of aid, structural adjustment and democracy may exacerbate social dislocation (Boyce, 1997), accentuate social division (Cohen, Herring, 1997), or lead to polarization along ethnic lines (Lund, Rubin, Hara, 1997) (in Lund, 1998). Conflict impact assessments should be designed.

[24] J. Cockell (1998) "Toward Response-Oriented Early Warning Analysis", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder.

Option 1: structural versus operational conflict prevention framework

The key question that has to be addressed is on the objective of the framework. The typology on conflict prognostication models has demonstrated that several approaches may be chosen (i.e. descriptive, explanation, apprehension, prediction), with clear methodological consequences. As was already mentioned under the heading of policy relevance of theoretic prognostication modeling, a "good-enough model" for apprehension seems most appropriate here. In a somewhat more general sense, the objective of the framework could be linked to defining the mission, which again is related to the phase (timing) in conflict: (a) to prevent the outbreak of hostilities (to keep the dispute non-military and non-violent), (b) to contain, moderate, or terminate hostilities, and (c) to settle the underlying dispute (targeting of root causes). A clear distinction should be made between conflict prevention policy in general and a conflict assessment framework.

Recommendation: the key objective of the framework should be to contribute to finding conflict remedies in such a way that they are fought out in a non-violent manner (i.e. transforming potentially violent conflict into political conflict). Hence, the framework should focus on operational conflict prevention.

Because it is of significance for the final choice on indicators to monitor (option 5), a further comment should be made with regard to causes of conflict and adequate responses. Phase II of the Clingendael research project on Causes of Conflict in the Third World has resulted in recommendations for policy interventions and the formulation of programs to tackle the issues that eventually lead to violent conflict.[25] One of the major conclusions of the research has been the close relation of political-military factors to the outbreak of violent conflicts. Conversely, and against general expectation, no direct relationship was found between socioeconomic factors and the outbreak of violent conflict. The cluster of socioeconomic factors, however, refers to structural background conditions within societies that provide a potential breeding ground for discontent and political mobilization.[26] Socioeconomic issues, therefore, are primarily important for the long-term prevention of conflict. Instead, in order to monitor the dynamics of conflicts and assess the risk of conflict escalation, indicators that relate to the state are of central significance. This is the case with regard to the role of the state (institutional capacity and legitimacy of the state), as well as the nature of the prevailing political system (among others: democratization, political culture, relations between the various branches and levels of government, characteristics of the degree of openness and decision making processes, and the participation rate of various groups in society).

The ultimate objective of conflict prevention policy may be to take away the causes of conflict. However, since this is a highly complex matter, it cannot be addressed solely by the policy field of conflict prevention. Instead, a broad approach is needed, which includes other policy fields as well (trade, development co-operation, finance). In other words, s*tructural* conflict prevention should be part of a larger policy framework.

Recommendation: Although the framework has the specific target of operational conflict prevention, it should be placed in a broader context of integrated policy directed towards

[25] See P. Douma, G. Frerks, L. van de Goor (1999) *Causes of Conflict in the Third World; Synthesis Report*, The Netherlands Institute of International Relations 'Clingendael'.

[26] In the theoretical conflict prognostication models, this finding is most evident from Gurr's research on Minorities at Risk.

conflict prevention. This is of particular significance when formulating policy responses.[27] *A so-called country profile should be broken down on the basis of the Dutch government's policy instruments, in order to keep the linkage with policy as clear as possible.*

Option 2: generic versus specific framework

The issue of generic versus specific is here interpreted in relation to the type of conflict. With regard to a global[28] versus a regional model, we will only remark here that a regional dimension may contribute to a further specification in indicators, but this is not a first prerequisite.[29] A broad range of phenomena has been identified to send out specific warnings: armed conflict, geno/politicide, democide, refugee flows, internal displacement, state breakdown, minorities at risk, political terror, and gross human rights violations.

Recommendation: A generic conflict model of state failure (interpreted in the broad sense of state incapacity to deal with its problem in a non-violent way) is preferable, otherwise too much emphasis is put on the consequences of conflict.[30] *Moreover, from a policy point of view, static labeling of conflict could result in inadequate measures in the field of management or resolution, since it focuses attention too much on only one dimension of a conflict.*

When conflict intensifies, a specification is required (see also option 3, timing of warning), and a focus on the uniqueness of each crisis is in particular significant when formulating responses.

Option 3: timing of warning

Although the division is not as rigid as it may sound, the concepts of risk assessment and early warning include a time dimension. Whereas risk assessments are based on the analysis of remote and intermediate conditions, early warnings tend to focus on short term developments or events that are likely to accelerate or trigger rapid escalation of conflict. This could be interpreted as a reflection of the choice if one wants to prevent crisis in the short term (and therefore only needs to know when conflict is truly escalating), or rather create stability in the middle and long term (and include an insight in background conditions). Both seem to hold value since they relate to static as well as dynamic elements of conflict assessment. The issue should therefore mainly be seen in relation to the choice on indicators and the stages of conflict; on determining the transition phase or "decision point" of conflict becoming violent or remaining non-violent.

Recommendation: When the framework does not analyze the causes of conflict, then an increased risk exists of the framework becoming an instrument for reacting to symptoms of conflict. The framework should include the early stage of conflict development (hence risk assessment). When the conflict potential intensifies, and there are increasing threats to peace, then fine-tuning is necessary with case-specific indicators. Conflict should be seen as part of

[27] Cockell (1997):"Most internal conflicts … evince both the paralysis of dialogue between political elites as well as the presence of fundamental socioeconomic and political grievances. Effective preventive action should therefore include both the high politics of preventive diplomacy as well as the complementary societal initiatives of preventive peacebuilding."

[28] For practical and financial reasons, the framework developed here is not designed to assess conflict potential on all types of conflict anywhere in the world. For this purpose it would be necessary to develop an automated data base system. If it is deemed important to develop such a system, the effort should be an international one.

[29] See also the State Failure Project Phase II, that has tested this argument in the Sub-Saharan African context.

[30] This implies a clear theoretic position with regard to causes and consequences of conflict. See also page 6 "Methodology and the choice on indicators".

a political process in which various actors make choices. These decision moments are of crucial significance for the development of a conflict assessment framework.

Option 4: qualitative versus quantitative approach

Here, the distinction qualitative-quantitative is not made with regard to general methodology and data/indicators, but in relation to the development of a framework and its approach toward the intensity of conflict. The quantitative option may then be described as the effort of clearly distinguishing between the stages of conflict, and defining a measure (questionnaire) for deciding on the specific phase of conflict and passing of a threshold. This approach is in particular suitable when the placement in a certain conflict phase is deemed important and it is emphasized that each stage has its own issues, points of attention, and hence, policy responses. The qualitative option involves an emphasis on movement and direction –trend lines– instead of a clear demarcation between phases. These trend lines then enable to track the dynamics of a process, and eventually the escalatory development of a conflict.[31]

Recommendation: Indicators should not be applied in a mechanistic way that ignores the individual characteristics of a society at risk. Each state will have its own threshold of collapse, instead of a universal breaking point. Furthermore, each state will respond differently to specific factors or combinations of factors. Hence, additional qualitative analysis of quantitative data is necessary in order to weigh these data more accurately in a specific setting. This is imperative if one aims at addressing these problems (hence responding) adequately. For specific stages, particular indicators may receive special attention, or additional indicators may be included. In a phase of increasing tension (the decision point of a conflict becoming violent or remaining non-violent), for example, local leaders and military forces deserve specific attention. We would recommend a qualitative approach in delineating phases.

Option 5: choice on the indicators

Here we will not try to give an overview of choices that may be made on combinations of indicators. The indicator choice should be a reflection of all of the above-mentioned options and of the policy instruments available. Evaluation of the significance of including indicator (categories) in the framework should not only be based on their anticipatory capacity, but also to what extent they point to possible points for intervention. A clear approach should be chosen, which prioritizes certain conflict factors such that they may be targeted for specific operational responses, and in which indicator categories match with current policy frameworks.[32] It may then become possible to address the issue of the process link, by matching analysis with operational capacity.

Recommendation: The indicators should have a clear focus. We would recommend the approach to be state- or political entrepreneur-oriented (i.e. relations between state and society) as opposed to solely group-oriented, in an attempt to keep the framework generic in nature. Indicators should then be policy-directed (what is the policy of the government with regard to political, economic, social, and cultural issues? Are there clear patterns or discrimination? Are these intentional or unintentional?), but also relate these to pressures

[31] For a clear example of the effect of the chosen approach on the framework, see appendix 2. The Fund for Peace framework could be interpreted as a qualitative approach, whereas the Federal Ministry for Economic Co-operation and Development (BMZ) chooses a more quantitative delineation.

[32] Exemplary would be the approach of the Fund for Peace (see appendix 2). Its emphasis on the concept of sustainable security in combination with a state-oriented approach holds operational value by focusing on "capacity-building" of the four core state institutions (police, military, civil service and system of justice).

that are existent in the specific context (background situation): demography, humanitarian, environment, economy, and politics. Further, the indicators should be indicative of fields for which policy instruments are available. This is important if one wants to keep the link with policy as clear as possible.

VII. Further Design of a Conflict Assessment Framework

As soon as clarity is obtained with regard to the above-mentioned options, which could be interpreted as the results of a needs-assessment by the end-user, further steps are taken in the development of the framework. This should not be an effort in itself, but should be linked to the policy instruments available to the Dutch government. None of the models discussed here have been successful in making this link with the policy practice. Analysis focuses on the causes of conflict, or focuses on the escalation process. The effort at establishing a link between situation analysis and policy instruments, then, is innovative and of extreme importance.

Methodology and design

Based on the undertaken stocktaking of conflict prognostication efforts and its most significant findings, the following questions need to be addressed in detail:

- Which indicators will be included for a conflict assessment?
  Recommendation: these have to be key indicator categories that are assumed to be significant and hence should be monitored during all stages of conflict. In this way, a trend line may be distinguished. The choice on these key indicators clearly depends on the central assumptions, which we here recommend to be state- or political entrepreneur-oriented, and on the objective of the framework which should be in line with the available policy instruments.
- How do we decide on the stages of conflict? On what grounds do we consider the conflict assessment to be "critical", and focus on specific indicators to monitor?
  Recommendation: as was indicated under option 4, a qualitative approach is considered to be preferable. In an attempt to avoid a generic delimitation between phases (in line with the assumption that no universal breaking point exists), a "narrative" description or characterization of the transition criteria could be included in the assessment. One way to do this would be a qualitative interpretation of the concepts "conflict carrying capacity" and "conflict civility".[33]
- When we assume that for the response capacity it is necessary to adopt a case-specific approach, how do we integrate the necessary additional indicators in the framework?
  Recommendation: for each stage of the conflict response options will be indicated. When the decision is made to respond/take action, an overview is presented of the possible options in goals (targets) and instruments. To decide on the appropriateness of the instrument, and to anticipate on its efficacy and impact on the conflict, case-specific and instrument-specific indicators need to be added to the assessment. It should however be realized that with the intensification of the conflict, the possibilities for this prospective policy analysis are reduced.

[33] For the original –quantitative– interpretation of the concepts in the PANDA conflict prognostication project by Bond, see appendix 1.

Criteria for evaluation of the tentative framework
Because the framework for conflict assessment is for operational use in an institutional context, the assessments following from the framework should be evaluated on the ability to answer the following questions:

- Are the warnings *credible* and *reliable* enough to attract the attention of decision-makers to consider responding to them? Criteria for including indicators in the framework:
    - they should be relevant, i.e. be an indication of causality (although the question remains whether we know enough about causality)
    - they should be operational in real-time, i.e. possible to regularly monitor, which implies that the data have to be available and reliable
- Are the warnings *early* enough to allow for planning and implementing actions?

This implies that the framework needs to convincingly address the issues of improving *information collection* (structured monitoring on the basis of indicators), *analysis* (assessment on the basis of relevant indicators and an understanding of the dynamics of conflict escalation), *specific problem identification* (clarity of mission), and *identification of useful programmatic action* (response options and policy assessment).

Considerations related to the practical use:

- Is the framework clear, easy to use, etcetera. (in application, in evaluation/assessment, indicative for response)? This depends on who will be the user of the framework (who is going to complete the form, who will assess the information, who will decide on a possible response?)

Contextual preconditions and further policy related study
A well-functioning framework requires analysis of the applicability of certain policy tools to the particular conflict's various main needs and the likely local response to their use, in order to spell out the short term, medium term and long term priorities.[34] In this regard, several kinds of analysis are needed. Adelman and Schmeidl (1996) distinguish:

(a) Generic knowledge of the advantages and disadvantages of a range of individual policy tools
(b) Policy-relevant lessons from retrospective studies of recent conflict situations where preventive responses have been launched, and that either succeeded in avoiding escalation or failed
(c) Country or region-specific analyses that seek to anticipate the applicability of particular measures and multi-tool strategies to specific settings
(d) Organizational assessments of comparative capacities of different decision-making and implementation mechanisms in undertaking the various tasks of early warning and preventive responses.

[34] It is important to realize what can and cannot be expected from a conflict assessment framework. We have already discussed various issues with regard to predictability and practical feasibility. The issue of political desirability we have not really touched upon, although we realize that this issue holds consequences for the possibility and effectiveness of response options as well. And although this cannot be included in framework we here develop, the dilemmas on national interest, political will, and principles of sovereignty and non-interference certainly have to be addressed in another context.

The issue mentioned under (a) will be addressed in a general stocktaking and assessment of the conflict prevention measures and tools as available to the Netherlands Ministry of Foreign Affairs. A brief inventory of conflict-related policy instruments used by other countries will also be completed as part of the study. In addition, international policy instruments will be evaluated. In order to enhance our understanding of their working, efficacy, application, and timing, six case studies will be conducted (Sri Lanka, Afghanistan, Liberia, Rwanda, Sudan, and Guatemala). On the basis of these findings, the indicator-based conflict assessment framework will be linked to the identified policy response options in a so-called toolbox-approach (issues (b), (c) and (d)). As was previously mentioned, the work of Michael Lund on prospective conflict policy analysis and his analysis on individual conflict management instruments may be helpful. We should however make a clear distinction between policy *goals* ("good governance", "improving record on human rights", "improve mutual understanding among conflicting parties") and policy *instruments*. On the basis of this distinction we can assess the policy goals as well as the choice on policy instruments to attain these goals.

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Appendix 1: Theoretic Conflict Prognostication Models

Structural models of conflict prognostication:

I. Minorities At Risk
II. State Failure Project
III. PIOOM Human Rights Violations

Dynamic models of conflict prognostication:

IV. Accelerators of Genocide Project
V. Life Integrity Violations Analysis (LIVA)
VI. Protocol for the Assessment of Nonviolent Direct Action (PANDA)
VII. Conflict Early Warning Project – Pattern Recognition
VIII. Cluster Analysis

I. A Risk Assessment Model for Communal Conflict Minorities At Risk[1]

The risk assessment model of Gurr is based on the *Minorities At Risk Project*, and focuses on ethnic minority groups within existing states. The project in itself intends to specify the conditions under which some ethnic groups are drawn into cycles of rebellion and repression. The model aims at identifying groups at greatest risk of victimization in future episodes of ethnic warfare.[2]

Figure 4: Risk assessments on ethnic minorities (Gurr, 1998).

The Minorities At Risk Project has developed a theoretical model in which the concepts of grievances, mobilization, rebellion and repression are hypothetically linked. Statistical analysis was used to identify the correlation between these concepts, which found a direct link between mobilization and rebellion; an indirect link between grievances and rebellion (through a positive correlation between grievances and mobilization); and a positive correlation between group coherence, repression, and grievances on rebellion. These findings, then, are used in the development of a range of indicators for the assessment of the potential risk for communal conflict, focusing on group incentives, capacity, and opportunities for collective action.

[1] Sources: Gurr, T. (1994) Peoples Against States: Ethnopolitical Conflict and the Changing World System, in *International Studies Quarterly* 38, pp. 347-377; Gurr, T. (1994) Testing and Using a Model of Communal Conflict for Early Warning, in *The Journal of Ethno-Development* 4(1), pp. 20-24; Gurr, T. (1997) A Risk Assessment Model of Ethnopolitical Rebellion, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); Gurr, T., B. Harff (1994) *Ethnic Conflict in World Politics*, chapter 5 "A framework for analysis of ethnopolitical mobilization and conflict", Boulder: Westview; Gurr, T., B. Harff (1998) Systematic Early Warning of Humanitarian Emergencies, in *Journal of Peace Research* 35(5), pp. 551-579.

[2] A limitation is that the empirical data on indicators are for politically-active communal groups. They do not suffice as data necessary to identify non-communal groups at risk of politicide (Gurr and Harff, 1998).

INDICATORS OF RISK FACTORS OF ETHNOPOLITICAL REBELLION
A. Group Incentives
1. Lost Autonomy 2. Economic Discrimination 3. Political Discrimination 4. Cultural Discrimination
B. Group Capacity
1. Cultural Identity 2. Militant Mobilization
C. Group Opportunities
1. Recent Changes in Regime Structure 2. Support from Kindred Groups

Figure 5: Indicators of communal conflict

On the basis of these indicators, a Risk Index can be developed that quantifies information designed to help answer the question which politically active communal groups are at greatest risk of ethno-political rebellion. Serious future rebellions are most likely among groups with high incentives and medium-to high capacity *and* opportunities.

The model has limited itself to structural conditions, but not without acknowledging that in order to come to early warnings, dynamic indicators/accelerators and trigger events need to be added. In a recent article, Gurr and Harff (1998) have indeed made the attempt to do this, and they have formulated eight accelerators of ethno-rebellion (see figure 6; see also model 4 'Accelerators of Genocide Project' in this appendix).

They further explain that the theoretical framework is not likely to change, but the results of future research may lead to changes in the indicators used to operationalize its key concepts.

ACCELERATORS OF ETHNO-REBELLION[3]
1. Violations: Attacks on or threats to core symbols of ethnic group identity
2. Demand Escalation: Qualitative changes in demands made on behalf of an ethnic group (changes in group rhetoric)
3. Group Militancy: Increase in the Disposition and capacity of elements within the group to use force and violence in pursuit of their objectives (changes in group actions)
4. Domestic Support: Increase in symbolic or political support for group objectives from domestic actors
5. External Support: Increase in symbolic, political, or military support for communal group objectives from international actors
6. Elite instability: Disunity within the state elite, conflict and inefficiency in the conduct of routine government
7. Elite Insecurity: Responses by state elites to perceived threats from domestic challengers short of open rebellion
8. Occurrence of violent opposition by kindred groups in neighboring countries

Figure 6: Accelerators for Communal Conflict

Relevance of the findings for the policy context

In a conflict situation in which it is clear from the outset that conflict is ethnically motivated, or where ethnicity has become a mobilizing factor, the model provides a good insight. On the basis of the

[3] See Harff and Gurr (1998).

model's risk assessment, it may be possible to identify and analyze alternative responses that may reduce those risks. In particular by adding the accelerator events, it has become possible to study how these might aggravate or moderate the impact of the general conditions. Whereas the structural conditions focus on the group level, the accelerators make a link to the state level. As a limitation of the model it should be noted that it is still operating with hindsight. In this regard, it is extensively tested for validity and reliability, to reduce the chance of 'false positives' and 'false negatives' to a minimum. Whether the model will be operational as a forecasting device, and in this regard will stimulate responses that will prevent what is predicted, has not been of major concern to the modelers.

	MINORITIES AT RISK PROJECT
	T. Gurr, University of Maryland
Methodology	Group profiles (conflict chronologies, narrative summaries, coded data on group's status, traits and political activities) Statistical and comparative methods. Correlates through study of historic cases.
Aim	Explanation, finding causality in conflict factors
Conflict-preventive focus	Structural
Type of conflict	Communal (ethno-political) conflict
Timing of warning	Longer-term risk assessment
Approach	Quantitative

Figure 7: Overview of Minorities At Risk as Conflict Prognostication Model

II. State Failure Project[4]

The *State Failure Task Force*[5] was established in 1994 to design and carry out a data-driven study on the correlates of state failure[6], with the ultimate objective of developing a methodology to identify key factors and critical thresholds signaling a high risk of political crisis in countries some two years in advance. Research, however, is still in an early phase, and includes partial state failure since the occurrence of complete state collapse are "too few for meaningful generalization" (Esty a.o. 1998).

KEY CONCEPTS	SIGNIFICANT VARIABLES
A. Political and Leadership Issues	*A. Political/Leadership*
1. Regime capacity 2. Elite characteristics 3. Political and economic cleavages 4. Conflictual political culture 5. International influence	1. party legitimacy 2. party fractionalization 3. executive dependence on legislature 4. separatist activity 5. years since major regime change 6. ethnic character of ruling elite 7. religious character of ruling elite 8. political rights index 9. maximum cleavage 10. democracy
B. Demographic and Societal Issues	*B. Demographic/Societal*
1. population pressure 2. mortality 3. education 4. militarization of society	1. calories/capita/day 2. military personnel/physicians' ratio 3. civil liberties index 4. infant mortality 5. life expectancy 6. extended longevity 7. percent of children in primary school 8. percent of teens in secondary school 9. girls/boys in secondary school 10. youth bulge 11. labor force/population
C. Economic and Environmental Issues	*C. Economic/Environmental*
1. economic strength 2. quality of life 3. constraints on resource base 4. government and economic management 5. economic openness and trade 6. international economic aid	1. defense expenditure/total government exp. 2. government revenues/GDP 3. government expenditure/GDP 4. investment share of GDP 5. trade openness (import plus export/GDP) 6. real GDP/capita 7. cropland area 8. land burden 9. access to safe water 10. famine reports in 'The New York Times'

Figure 8: Key concepts and statistically significant indicator categories for state failure research.

[4] Sources: Esty, D., J. Goldstone, T. Gurr et. al. (1995) *Working Papers State Failure Task Force Report;* Esty, D., J. Goldstone, T. Gurr et. al. (1997) "The State Failure Project: Early Warning Research for U.S. Foreign Policy Planning", in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); Esty, D., J. Goldstone, T. Gurr et. al. (1998) *State Failure Task Force Report: Phase II Findings.*

[5] Consisting of academic experts, data collection and management specialists (CIESIN), and analytic methods professionals (SAIC). The research was commissioned by the Central Intelligence Agency's Directorate of Intelligence.

[6] Label for a type of severe political crisis in which institutions of the central state are so weakened that they can no longer maintain authority or political order, usually occurring in circumstances of widespread and violent civil conflict and accompanied by severe humanitarian crises (Esty a.o. 1998).

The problem set of state failures, then, includes four categories, distinguishing for the type of crisis and extent of state failure (by scaling events by magnitude): Revolutionary wars (with Small and Singer 1992 as primary source), ethnic wars (Minorities of Risk as primary source), geno/politicides (Harff 1992 as primary source), and adverse or disruptive regime transitions (Polity III data set of Jaggers and Gurr 1995).

For the time span of 1955 to 1994 113 consolidated cases of state failure were identified, and these were matched with a random sample of control cases to identify those independent (sets of) variables that discriminated most significantly and efficiently. Initially 617 measures were included in the data set, of which 31 appeared to be statistically significant in differentiating between states that had a regime crisis and control cases that did not (see figure 8). Multivariate analysis, then, identified a single best model (approaching 70 % accuracy) which includes three variables: *openness to international trade* (with high openness associated with a low risk of state failure), *infant mortality* (as indicative of the quality of life in a society, with above-international median rates associated with high risk of state failure), and *democracy* (above a middling threshold of democracy associated with low risk of state failure, because of conflict-inhibiting effects of democratic governance)[7]. Further, statistical analysis unfolded an interaction effect between democracy and the other two variables: the risk of state failure in more democratic countries is greater when infant mortality is high, and trade openness low, while in less democratic countries this is the case regardless of the level of infant mortality.

In order to extend the generic model with models of *magnitudes* and *duration* of conflict, the set of background variables needs to be expanded. Also some first steps are taken in elaborating on the generic model with additional variables, in order to enhance the explanatory power for specific *types* of state failure.[8]

Phase II of the State Failure Project (1998) has tried to refine the measure of democracy, to study in more detail the vulnerability of partial democracies[9]. Further it developed a regional variant of the global model to anticipate state failures in Sub-Saharan Africa,[10] and a focus on the role of environmental factors[11] in state failures. Also, the Task Force comes with some policy implications (see appendix 2).

Relevance of the findings for the policy context

Although the methods and techniques of the State Failure Project are hard to copy because of the scale of the project, and the multidisciplinary knowledge brought in by the large research team of specialists, the research provides significant insights in correlation between conflict factors. These findings, e.g. with regard to the vulnerability of partial democracies, could be interesting for use in a policy context. The project has also demonstrated the validity of using indicator *categories* instead of well-defined indicators, since variables can be measured in various ways because of the inter-correlation between concepts (see also note 7).[12]

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[7] *Infant mortality* is a marker indicator that represents a basket of interdependent conditions, which could be substituted by other quality of life indicator, dependent on availability of data. *Democracy* is a summary measure of open political institutions, correlating strongly with indices of political rights, civil liberties and party legitimacy. *Trade openness* has few close correlates (Esty e.a. 1998).

[8] For ethnic conflicts, these include youth bulge; extent of ruling elite representing one group in an ethnically divided society. For adverse or disruptive regime transitions, the length of time that the type of regime is in place appears to hold high significance.

[9] The level of democracy was found to be a significant factor. Partial democracies were shown to be several times more vulnerable to state failure than either full democracies or autocracies.

[10] The model includes: Level of trade openness, level of democracy and changes in material living standards, plus additional dimensions of urban share of population, type of colonial heritage, and presence of ethnic discrimination.

[11] A "mediated" model was developed, in which environmental change influences the quality of life, and which in turn affects the risk of state failure.

[12] This finding is of relevance for the conflict and policy assessment framework to be developed by Clingendael. The idea that indicator categories can be 'measured' in various ways, is also taken up by the Fund for Peace model.

However, although the generic model as identified by the State Failure Task Force strengthens the case for a systematic approach to risk assessment and early warning of political crises, its limitations should be recognized. For example, the model identified is generic in character, and no models have yet been identified that help account for the type or degree of state failure, or the sequential relations among them. Also a lot more needs to be learned about conditions that keep partial state failures from escalating. Further, most variables refer to structural conditions, and thus need to be complemented by the analysis of potential accelerators if they are to be used for early warning. Thus far, it remains to be demonstrated whether the model will be accurate in identifying *prospective* cases of state failure. The model's findings may nevertheless be used in a qualitative way by directing policy (see appendix 2).

	STATE FAILURE PROJECT
	Esty, Goldstone, Gurr, Surko, Unger / State Failure Task Force
Methodology	Quantitative, indicator-based macro-approach. Correlates of state failure during the last 40 years. Global reach.
Aim	Identify key factors and critical thresholds, signaling high risk of political crisis in countries some 2 years in advance.
Conflict-preventive focus	Structural
Type of conflict	Generic, state failure
Timing of warning	Long-term risk assessment
Approach	Quantitative

Figure 9: Overview of State Failure Project as Conflict Prognostication Model

III. PIOOM
Monitoring Human Rights Violations[13]

Jongman and Schmid (1994) of PIOOM have developed an extensive monitoring "checklist" on human rights violations[14], to be submitted regularly by two in-country monitors and one regional expert. They choose the approach of standardized and sustained monitoring as a middle-station between traditional fact-finding and future early warning, with the more than 500 indicators providing the basis of a data set which can be inserted into various models to forecast increased risks (Gupta, Jongman, Schmid, 1993). The primary objective is to gain a better understanding of the root causes of fundamental human rights violations, and discover the facilitating and inhibiting factors of abuses.[15] For this purpose, past data and analyses will be stored in a documentation center, which will be the basis for trend analysis on the incidence of human right violations, and for risk assessment in particular periods and places. In a next phase, indicators need to be detected which can serve as early warning signals for impending violations (see figure 12). These focus on the political system, on transition/elections, the judiciary, media freedom, support for 'radical' groups, political protest, and the economy. The ultimate goal will be to develop the capacity to make policy recommendations, thereby enabling prevention or at least mitigation of the predicted outcome.

INDICATORS FOR MONITORING HUMAN RIGHTS VIOLATIONS
A. CPDQ (165 questions)
1. General country data 2. Demographic data 3. Socioeconomic data 4. Historic data 5. Legal data 6. Political data 7. Conflict data [16]
B. MARQ (132 questions) (For max. 5 highly mobilized minorities at risk)
1. Group disadvantages (stress, discrimination) 2. Group demands and grievances 3. Political rights 4. Economic rights and benefits 5. Social and cultural rights 6. Group organization for political action 7. Political strategies of groups 8. Profile of anti-regime political action
C. 12 types of human rights

Figure 10: Indicators on human rights violations

[13] Sources: Gupta, A. Jongman, A. Schmid (1993) *Creating a Composite Index for Assessing Country Performance in the Field of Human Rights: Proposal for a New Methodology*, Leiden: PIOOM; Jongman, A. (1994) The PIOOM Program on Monitoring and Early Warning of Humanitarian Crises, in *The Journal of Ethno-Development* 4(1), pp. 65-71; Jongman, A. (1998) Oorlog en Politiek Geweld, in B. Bomert, H. de Lange (eds.) *Internationale Veiligheidsvraagstukken en het Nederlands Perspectief*, Jaarboek Vrede en Veiligheid 1998: Nijmegen, pp. 33-51; Jongman, A., A. Schmid (1994) *Monitoring Human Rights; Manual for Assessing Country Performance*, Leiden: PIOOM.

[14] Index of countries' human rights violations. This index takes into account the argument of cultural relativism (Western perception on human rights), by distinguishing gross human rights violations from political rights and civil liberties, the former one being considered 'non-negotiable'.

[15] The scientific goal of monitoring being the identification of cultural, social, economic and political conditions which make the implementation of fundamental rights more likely.

[16] Possible cleavages in society; possible internal challenges to governing elite, which forces to reallocate resources; response governing elite (policies of accommodation and coercion); external challenges to governing elite; inflammatory rhetoric against groups (by regime, opposition, media, religious leaders).

The checklist consists of 2 lists for possible root causes of conflict, and 12 lists for specific human rights. Here the focus is on the first two lists, the Country Profile Date Questionnaire (CPDQ) with the main focus on the behavior of government, and the Minorities at Risk Questionnaire (MARQ) on groups potentially at risk (based on Minorities at Risk Project of Gurr) as indicators with a high conflict prediction potential *when fed into an adequate model.*

The research techniques put forward by PIOOM include regression analysis on long series of data over time to provide insight in trends, and causal analysis to identify the turning points in trends, which may form the basis of forecasts.

	PIOOM
	A. Schmid, A. Jongman
Methodology	Delphi-method. Checklist to monitor conflict escalation (human rights), which are submitted regularly to different monitors (2 in-country, 1 regional expert)
Aim	Gain better understanding of root causes human rights violations. Discover facilitating and inhibiting factors.
Conflict-preventive focus	Structural and operational (direct)
Type of conflict	Human rights violations
Timing of warning	Longer-term risk assessment
Approach	Quantitative and qualitative

Figure 11: Overview of PIOOM Checklist on Human Rights Violations as Conflict Prognostication Model.

Relevance of the findings for the policy context

Human rights violations are often seen as the most clear signal to conflict potential and conflict escalation. For this reason monitoring is taken up by a large number of organizations. PIOOM has contributed in this regard by providing a more structured approach to this monitoring and information gathering exercise.

However, the manual that has been developed by PIOOM to monitor country situations with regard to human rights violations, and which should provide the input for a data information center and trend analysis, appears to be too extensive for practical and regular use. The anticipating capacities are therefore limited, even more so because it takes a considerable number of years before the data information system can be used for time series analysis.

Stages of Conflict	Characteristic Variables	Signals
1. Stable Social System	High degree of political stability and regime legitimacy	1. Functioning democracy, with minority rights protection 2. Regular peaceful transitions of power between government and opposition (no coups d'etat) 3. Independent judiciary 4. Free press 5. Social-revolutionary and ethno-secessionist groups without mass support 6. No abrupt deterioration of political condition due to (para-) military activities 7. No abrupt deterioration in economic condition

2. Political Tension Situation	Growing levels of systemic frustration and increasing social and political cleavages along sectarian identities	1. New political parties try to mobilize people around polarizing political or sectarian issues 2. Elections heatedly contested 3. Court rules sees as politically charges 4. Freedom of the press under stress as a result of growing polarization of opinion within society 5. Non-violent protests and violence against property and national symbols by radicals 6. Political protests by students, labor unions, sectarian groups 7. Rising unemployment, little economic growth
3. Serious dispute stage	Erosion of political legitimacy of the national government and rising acceptance of sectarian politics	1. Increasing use of inflammatory rhetoric by political elites and sectarian leaders 2. Election-time violence and charges of fraud 3. Increasing use of courts for political purpose by government 4. Freedom o the press threatened by threats from militant groups and by government pressure 5. Sporadic violence against individual political figures and/or members of ideological or ethnic groups 6. Terrorist and vigilante and (para-) military groups appear on the scene 7. Economy under stress: high unemployment, high inflation
4. Lower intensity conflict	Open hostility and armed conflict among factional groups; regime repression and insurgency	1. Increase of power among non-democratic forces 2. Civilian rule threated by military role in politics 3. Rule of law seriously impaired 4. Freedom of the press seriously impaired as a result of sanctions by militant groups and emergency measures of (military) regime 5. Intermittent armed conflict between government and opposition forces and/or sectors of the population 6. State of emergency; security forces violate human rights systematically 7. Capital flight, disinvestment
5. High intensity conflict	Open warfare among rival groups	1. Breakdown of civil society; disintegration of central government 2. Multiple claims of political sovereignty 3. Rule of law abolished; political justice 4. Media as propaganda instruments of regime 5. Open warfare among rival groups with military taking sides or splitting apart along group lines 6. Military or emergency rule 7. Black market economy dominant, falling production 8. Deteriorating health situation, decreasing life expectancy 9. Growing dependence on food imports

Figure 12: The Stages of Conflict and their Signals (Jongman, 1994: 69-70)

IV. Accelerators of Genocide Project[17]

The modeling effort of Harff focuses on accelerators in the conflict process. Because these accelerators are mainly context-specific, she prefers a case studies approach by looking at the basic chronology of the conflict; the theoretically specified conditions (causal variables) of communal conflicts; and an analysis of accelerators derived from event data. The approach, then, theoretically specifies the variables that accelerate geno/politicide, and then operationalizes the accelerator variables using events date.[18] In this way, the accelerators are tools for theory-driven monitoring.

Although the model focuses on accelerators of geno/politicide, the same process could be used for other types of conflicts, Harff argues. Experts of specific kinds of conflicts can identify lists of potential accelerators, while others can be identified inductively. "What counts as evidence is the observation of a sharp increase in clusters, sets, or numbers of accelerators during the three months prior to the onset of an event. Expected outcomes should correspond to the basic logic of the sequential model, namely that the static model plus accelerators plus triggers should exponentially increase escalation", Harff argues (1997). The expectation is that accelerator events should increase in relative and absolute frequency three to six months prior to the onset of a major episode, and be accompanied by a simultaneous decline in cooperative activity (decelerators).

ACCELERATORS OF GENOCIDE AND POLITICIDE[19]
1. Occurrence of Violent Opposition by Kindred Groups in Neighboring Countries
2. Increase in External Support for Politically Active Groups
3. Threats of External Involvement Against Governing Elites
4. Increase in Size of, or Degree of Cohesion in, Opposition Group
5. Aggressive Posturing or Actions by Opposition Groups
6. Physical or Verbal Clashes
7. New Discriminatory or Restrictive Policies by the Regime
8. Life Integrity Violations by Government or Government-Supported Groups Against Targeted Groups

Figure 13: Accelerators of genocide

In order to test the model of accelerators, Harff compares perpetrator and non-perpetrator states. By using dynamic data on accelerators in retrospective analyses, she finds that, whereas in all cases background and intervening conditions indicated high levels of risk of genocide or humanitarian crisis, accelerators were useful in providing early warning indices of which cases were sliding toward genocide and when. The weighting of accelerator events on the basis of theory and evidence that some kinds of acceleration events are more important than others in moving conflict toward a particular outcome is being carried out as work in progress (Gurr and Harff, 1998).

[17] Sources: Harff, B. (1994) A Theoretical Model of Genocides and Politicides, in *The Journal of Ethno-Development* 4(1), pp. 25-30; Harff, B. (1997) Early Warning of Humanitarian Crises: Sequential Models and the Role of Accelerators, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); Gurr, T., B. Harff (1998) Systematic Early Warning of Humanitarian Emergencies, in *Journal of Peace Research* 35(5), pp. 551-579.

[18] This is in contrast to the inductive tradition of using events data to track international political conflicts and crises (Gurr and Harff, 1998).

[19] This should not be interpreted as a final set of accelerators. Instead, these need to be continuously evaluated, adapted and added to.

Figure 14:
Overview of Accelerators of Genocide Project as Conflict Prognostication Model

In assessing the potential for genocide and politicide, Harff proposes daily monitoring of high-risk situations to determine whether or not escalation occurs. The key to monitoring crisis development, then, lies in tracing accelerators and decelerators. This would provide the link between the theoretical models and the early warning.

Relevance of the findings in the policy context
The model pays key attention to accelerators and monitoring on these events to assess the conflict situation and its development. Although the model has not been extensively tested yet, and only a very small number of case studies has been executed, it would provide an argument for the possibility of monitoring on pre-specified standardized indicators. This makes the model better manageable than inductive approaches to identifying accelerators and triggers, which ask for computerized processing of information. Although the model of Harff is developed as a quantitative approach (linked to a data event system and the scaling of events in approximate order of severity), the approach could also be adopted to a more qualitative interpretation. Since the model has only been tested retrospectively, the question remains whether—when operational as a forecasting device—the somewhat late warning will leave enough room to respond in time and adequately.

	ACCELERATORS OF GENOCIDE PROJECT
	B. Harff, CIDCM Univerity of Maryland
Methodology	Sequential analysis. Case study research (chronology of conflict, theoretically specified conditions of communal conflicts, analysis of accelerators). List of accelerators by experts, tested in comparative cases. Accelerator-events derived from event data system (GEDS)
Aim	Anticipation; trace development of processes leading to onset of geno/politicide
Conflict-preventive focus	Operational (direct)
Type of conflict	Geno/politicide
Timing of warning	Medium to shorter-term early warning
Approach	Quantitative

Figure 15: Overview of Accelerators of Genocide Project as Conflict Prognostication Model.

V. LIVA – "Good Enough Model" Life Integrity Violations Analysis[20]

The focus of the work of Fein has mainly been on the specification of preconditions of geno-politicide and life integrity violations.[21] The *LIVA project* uses methods of content analysis (Amnesty International reports) to assess whether one could discriminate states perpetrating geno-politicide from other states before these crimes were corroborated. The model is directed toward understanding as well as responding to geno/politicide. The aim, then, is to detect signs and portents of escalation of violence towards geno/politicide; to relate the levels of violation to underlying and intervening causes; and to relate life integrity violations to other kinds of rights violations. With regard to preventive action, LIVA aims at tracing the impact of government intervention and aid on the level of violation; considering the efficacy of different response strategies at different levels of violation; and tracing the impact of NGO campaigns against various classes of violators.

The response levels to life integrity violations as suggested by Fein are of a very general nature. Although she distinguishes normative responses from economic and physical sanctions, she does not go into the implications of these responses.

	Responses to Perpetrator		
	I. Normative:	II. Economic sanctions:*	III. Physical:
Level of Life Integrity Violation:	1. Appeal 2. Condemnation 3. Warning	1. Reduction 2. Cut-off 3. Embargo	1. Peace-keeping force 2. Multilateral humani tarian intervention 3. Other intervention
E. Epidemic ** Genocide…	-	Embargo	Intervention or war
D. Disaster or danger of disaster	Warning	Embargo Cut-off	All three
C. Calculated deaths	Warning	Cut-off	-
B. Bad	Condemnation Appeal	Reduction	-
A. Other violations	Appeal	-	-

* The table illustrates only negative economic sanctions (assuming the simultaneous cut-off of military aid); but assistance can serve as a positive and negative sanction.
A complementary approach (advocated at times by International Alert) is to tie the successful conclusion of negotiations and mediated solutions to aid packages, using development assistance as an incentive.

** This stage, best describing the genocides of Nazi Germany during 1941-45, was not found in the present study. Early response to anti-Jewish discrimination and violations of life integrity might well have checked Germany's use of epidemic genocide during the war.

Figure 16: Suggested response levels to life integrity violations (in Fein, 1992: 53)

[20] Sources: Fein, H. (1992) Dangerous States and Endangered Peoples: Implications of Life Integrity Violations Analysis, in K. Rupesinghe, M. Kuroda (eds.) *Early Warning and Conflict Resolution*, New York: St. Martin's Press, pp. 40-61; Fein, H. (1994) Tools and Alarms: Uses of Models for Explanation and Anticipation, in *The Journal of Ethno-Development* 4(1), pp. 31-35.

[21] Contrary to the broad approach to human rights by PIOOM, the LIVA model focuses on capital punishment and discrimination.

While there is much agreement between Fein and Harff on the precipitating events leading to geno/politicide[22], Fein proceeds in focusing on the responses at the pressure points. The indicators derived from the theoretical model are to apprehend, not to explain. (a Good Enough Model instead of a Causal Explanatory Model). The testing of models should thus not be the testing of indicators (as Harff does), but the testing of the effect of intervention/responses.

	LIVA – GOOD ENOUGH MODEL
	H. Fein
Methodology	Content analysis of Amnesty International country reports. Comparison of states with similar background (region, length of political experience since independence, similar colonial experience, similar degree of cultural heterogeneity, dominant religion), while one being perpetrator, and other non-perpetrator.
Aim	Apprehension; understanding as well as responding
Conflict-preventive focus	Structural and operational (direct)
Type of conflict	Geno/politicide; life integrity violations
Timing of warning	Medium to shorter term early warning, indication for response
Approach	Qualitative

Figure 17: Overview of LIVA as Conflict Prognostication Model

Relevance of the findings for the policy context

The contribution of the Good Enough Model of Fein is in particular found in the fact that it was one of the first theoretic efforts that broke with the highly quantitative and statistical approach to early warning and its focus on testing the models on scientific reliability and validity. The ideas are strongly in line with the call for response-oriented warnings and conflict impact assessments. Nevertheless, the arguments she puts forth of what is needed (i.e. focus on responses at pressure points and its effects) have been left undeveloped. The approach holds value as a qualitative study of why some states experience violent escalation into conflict while others do not, by each time comparing two states with similar background conditions. These 'small-scale' comparisons are much more specific than for example the State Failure Project that in a quantitative way identifies statistically significant variables by comparing conflict cases and non-conflict cases (from all over the world and over a time period of 50 years) . Fein's conclusion is that perpetrators differ from non-perpetrators by different *patterns* of life integrity violations. This implies the need for a specific focus on these patterns, and hence on ideologies and goals of states.

[22] With exception of the effect of external support for targeted groups (Fein, 1994).

VI. PANDA
Protocol for the Assessment of Nonviolent Direct Action[23]

PANDA seeks to identify conflict situations early in their development, before they erupt into violence, when the prospects of peaceful and constructive intervention are most promising. For this reason it tries to track interactions between state and non-state actors, to determine if and when conflicts become violent. The focus is on mass political conflict, i.e. popular mobilization for non-institutionalized collective action (Bond 1997). The approach is quantitative and statistical and makes use of the event data system KEDS to code and interpret real-time events.

First, the model determines what portion of reported events take place outside of the political system, in an attempt to answer two questions: are people (state and non-state actors) interacting within or beyond the rules set, and are these interactions of a peaceful or violent nature? The resultant combined measures ('conflict carrying capacity' of the system, and 'conflict civility' of non-state actors), then, offer an assessment of *system stress*.

INDICATORS FOR MASS POLITICAL CONFLICT
A. Outcome dimension: physical force indicators 1. violence 2. non-violence
B. Contentiousness dimension: 1. Routine action 2. Direct action
C. Coerciveness dimension: social, political, economic indicators 1. Range of sanctions 2. Costs

Figure 18: Indicator dimensions of mass political conflict

The central dimensions in the conceptual framework of the PANDA monitoring system are contentiousness and coerciveness. Contentiousness can be defined as the extent to which action is disruptive, reaching the outside bounds of routine resolution procedures (the outcome of which is a product of interests, capabilities, and wills of the antagonists). Coerciveness refers to the severity of negative sanctions or costs. A third dimension in the model is the outcome dimension, indicating the attribute of violence, and thus illustrating a conflict front where coerciveness and contentiousness are both of high intensity.

These dimensions are used to develop the key indicators of the model: conflict carrying capacity (referring to the behavior of the regime) and conflict civility (referring to the behavior of non-state actors). The conflict carrying capacity measure is an indicator of the intensity of conflict[24]. A six-point lethality measure is used for sanctions and violence. The predictions are for quarter-year periods (in

[23] Sources: Bond, D., K. Rothkin (1995) Recovering Events from Events Data, http://data.fas.harvard.edu/cfia/pnscs/DOCS/papers/EVENTS.html; Bond, D. (1997) Timely Conflict Risk Assessments and the PANDA Project, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); Bond, D. (1997) Indications of Social Change and Emergent Conflict: Toward Explanations of Conflict Processes, position paper for *Second International Workshop on Low Intensity Conflict*, Stockholm 4-6 June 1997; Bond, D., J. Jenkins et. al. (1997) Mapping Mass Political Conflict and Civil Society, in *Journal of Conflict Resolution* 41(4), pp. 553-579; Bond, D., S. Lee, K. Rothkin (1995) "PANDA's Early Warnings on Conflict", draft paper annual meeting *International Studies Association*, Chicago; Bond, D., K. Rothkin (1995) Recovering Events from Events Data, draft paper for *Annual Meeting of the American Political Science Association*, 2 September 1995.

[24] It is defined as the proportion of contentious action to all action, multiplied by the proportion of violent action to all direct action, and subtracted from unity to facilitate interpretation.

future monthly or bi-weekly). The carrying capacity of a system to manage conflict beyond its routine conflict management procedures is undermined by violent action. A combination of the two indicators, which can be presented graphically, gives an indication of whether political conflict is moving towards a violent confrontation.

Figure 19
Dimensions of conflict (Bond, 1998)

Relevance of the findings for the policy context
The events that are monitored include interactions with a positive as well as a negative impact on mass political conflict. In other words: conflict-generating ('accelerator') and conflict-inhibiting ('decelerator') behavior is included in the model. Although because of its quantitative and statistical approach the model is less useful for a response-oriented qualitative policy framework, its central concepts (conflict carrying capacity and conflict civility) hold value. It implies the need for a focus on actual behavior, which can indicate an intensification of political conflict towards violent conflict. The approach could therefore contribute in identifying transition or breaking points in the phases of conflict, and indicate points of intervention. For this purpose, however, the central concepts need to be newly interpreted in a qualitative way.

	PANDA
	D. Bond, Center for International Affairs, Harvard University
Methodology	Continuous monitoring of events (KEDS); full range of actors, issues, targets, forms of political action. Mapping of conflict and tracking of evolution.
Aim	Anticipation; examination of contentious and coercive, but not yet violent, behaviors which are evident early in conflict process.
Conflict-preventive focus	Operational (direct)
Type of conflict	Generic (including non-violent actions)
Timing of warning	Shorter term early warning
Approach	Quantitative

Figure 20: Overview of PANDA as Conflict Prognostication Model.

Figure 21
Example of a Conflict Risk Profile for Turkey (Bond, 1997)

VII. CEWP – Pattern Recognition Conflict Early Warning Project[25]

The prognostication project of Brecke at the Georgia Institute of Technology is a computerized conflict alert system, based on the assumption that harbinger configurations[26] exist and can be identified through a pattern-finding procedure. These could then serve as templates against which current country situations are compared. The critical design decision is what indicators should be collected that provide the best chance at finding patterns. Although background conditions as well as intervening and catalyst conditions are included, the focus is on indicators that occur early in the sequence leading to conflict. The theoretical approach selected to guide the choice of indicators is based around the concepts of mobilization, grievance and capability.

INDICATOR CATEGORIES
A. Catalyst indicators on mobilization
B. Background conditions indicators on grievances
C. Background and catalyst indicators on capabilities

Figure 22: Guide to indicator choice for pattern recognition

Key element of the approach is the combination of indicators. These combinations are made explicit for analysis by creating a grid picture for each country, for each day.[27] These cards are then run through pattern recognition software (Artificial Neural Network). The following issue is to discern the connection between country situation patterns and a particular type of conflict by developing conflict description patterns[28]. It is thus assumed that each type of conflict has a unique output grid pattern. If it is indeed true (the project is still work-in-progress) that particular patterns consistently appear before conflicts of particular types occur, and if there is a match with a current country situation pattern, then it could be said that conflict of a particular type is likely to happen.

Relevance of the findings for the policy context

The main reason for skepticism about this type of highly computerized and quantified research is that it is evaluated as being too technical, and that policy makers are not motivated to make decisions solely on output. Brecke, for this reason, aims at developing a model that is easy to use and also provides background information about the alert and the situation, information that is needed to judge whether a conflict alert should be taken seriously. Not only should the probability assessment specify what type of conflict is evolving, and what the nature of the escalation is, but it should also provide a time-varying probability assessment as to when conflict is to erupt. As to the question of why conflicts erupt, the model cannot provide any insight, nor for the type of response needed. For the moment, the model does not have relevance for the policy context (yet) because it is too much a work-in-progress. The search for patterns, however, remains an interesting and important one, as it is not the individual indicators, but instead the *patterns* that are considered of key importance in conflict prognostication.

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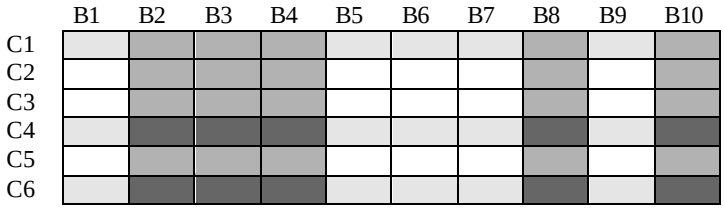
[25] Sources: Brecke, P. (1997) A Pattern Recognition Approach to Conflict Early Warning, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript).

[26] Particular combinations of values of indicators that have consistently appeared before the outbreak of conflicts.

[27] Each cell in the grid can take one out of four values: (1) background and catalyst condition both exist (2)background condition exists but catalyst condition not (3) background condition does not exist, but catalyst condition does (4) background and catalyst condition both do not exist.

[28] Each row consists of the criteria upon which the conflict taxonomy is constructed, and each column indicates the classification value.



B1—Has the level of malnutrition been increasing?
B2—Has one group been in a long-term dominant position?
B3—Is the society split along linguistic lines?
B4—Has economic Growth relative to population growth been declining?
B5—Are there strong regional inequalities in economic development?
B6—Has the dominant group used police powers to repress other groups?
B7—Did the current government come to power through force?
B8—Is the military dominated by a particular group?
B9—Is there a history of violent acts between the groups in the society?
B10—Has the terms of trade index been declining for five or more years?
C1—Are groups or individuals drawing attention to disparities in government treatment of different social groups?
C2—Are groups or individuals drawing attention to the recent entry into the society of others?
C3—Are groups or individuals raising the issue of the separateness of others?
C4—Are groups or individuals mobilizing public opinion against the government?
C5—Has an outside power declared its policy is that of non-interference?
C6—Has the government recently cracked down on the media?

Figure 23: Example of a simplified country situation grid (Brecke, 1998).
Black: both background condition and catalyst exist
Dark grey: background condition exists, catalyst does not
Light grey: background condition does not exist, catalyst does
White: neither background condition nor catalyst exist

	CONFLICT EARLY WARNING PROJECT
	P. Brecke, Georgia Institute of Technology
Methodology	Historic analogy. Make grid pictures for each country, each day and run through pattern recognition software (ANN). Time-varying probability assessment to anticipate when escalation. Conflict description patterns for each type of conflict.
Aim	Anticipation: Identify patterns of particular combinations of values of indicators that have consistently appeared before outbreak of historical cases of conflict. If patterns are found, then serve as templates against which current country situations are compared.
Conflict-preventive focus	Operational (direct)
Type of conflict	Generic
Timing of warning	Shorter term early warning
Approach	Quantitative

Figure 24: Overview of Pattern Recognition as Conflict Prognostication Model.

VIII. Cluster Analysis
Transition Between Stages of Conflict[29]

The cluster analysis of Schrodt and Gerner (1998) is not as much an early warning model, but an early warning technique that utilizes a dynamic approach to study the various stages in conflict development. The approach is based on the assumption that structural variables –although they are theoretically important– do not change at a rate sufficient for use as an early warning indicator. The use of event data without specific reference to background conditions is justified by the assumption that these will be reflected in *patterns of events* prior to a major change in the political system (i.e. lagged values of events are substitutes for structural variables).

Instead of contemporary studies that qualitatively delineate phases by emphasis on different types of behavior (e.g. the stages of conflict by Bloomfield and Moulton, 1997), Schrodt and Gerner have analyzed political behavior by monitoring the movement of a vector. A region in the vector space where points cluster over time, then, characterizes a 'phase'. Whenever there is an extended period of time when the parties to the conflict are reacting to each other in a consistent fashion, a cluster will occur. Contrary, these clusters begin to 'stretch' prior to breaking apart, which is a characteristic that can be used as an early warning indicator.

Figure 25

*Example of clusters for various phases of conflict in Israel *Schrodt and Gerner, 1998)*

Relevance of the findings for the policy context

The approach is a highly statistical exercise. As Schrodt and Gerner (1998) themselves observe, this approach "…faces the practical constraint that purely statistically-based warning systems are unlikely to be accepted in the qualitatively-oriented policy community". The approach holds value by focusing on the transition process in the stages of conflict. It has demonstrated that most of the time these transitions are made up of gradual change and only to a lesser degree of jumps. Hence there is a change in the behavior of the system prior to the phase transition, and behavior therefore is an important indicator to monitor. What behavior exactly we should monitor, Schrodt and Gerner are not conclusive on. The most obvious one—and also used in other models—would be a dimension on cooperation and conflict. Nor does the model point out *what* is to be expected, i.e. what the change is going to be. It should therefore only be seen as a supplement to structural models. "Because political behavior is a human activity …, human understanding and intuition are likely to be powerful tools in predicting that behavior", Schrodt and Gerner (1998) argue.

[29] Sources: Schrodt, P., D. Gerner (1997) Empirical Indicators of Crisis Phase in the Middle East, 1979-1995, in *Journal of Conflict Resolution* 41(4), pp. 529-552; Schrodt, P., D. Gerner (1997) Cluster Analysis as an Early Warning Technique for the Middle East, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manusript).

Appendix 2: Practical Efforts of Early Warning Modeling in a Policy Setting

(Attempted) Operational models:

I. United Nations Office for Research and Collection of Information (ORCI)
II. United Nations Humanitarian Early Warning System (HEWS)

Indicator model, framework design and guidelines for policy/practical use:

III. Federal Ministry for Economic Co-operation and Development (BMZ) – Germany
IV. The Fund for Peace – Analytical Model of Internal Conflict and State Collapse
V. Forum on Early Warning and Early Response (FEWER)
VI. Pilot study for an Early Warning System for the Swiss Foreign Ministry (FAST)
VII. Canadian Peacebuilding Initiative Strategic Framework – Department of Foreign Affairs and Trade (DFAIT)
VIII. Creative Associates International, Inc. – A Toolbox to Respond to Conflicts and Build Peace

Indicator model and policy implications/recommendations:

IX. State Failure Project Phase II

I. ORCI
United Nations Office for Research and Collection of Information[30]

Th Office for Research and Collection of Information (ORCI) has been operational from 1987 until 1992. During this period the office has attempted to develop an early warning system under the mandate to assess global trends and to prepare country, regional, sub-regional and issue-related profiles. ORCI's global data base consisted mainly of country profiles, with the purpose of providing the Secretary-General with reliable and up-to-date information regarding potential conflicts and crises that might endanger international peace and security. Although the focus was on the international system, the decision was made to select many indicators on the country level as well (Dedring, 1992).[31]

ORCI has spent considerable time on the development of indicators, including those related to massive flows of refugees and the 'triggering events' that are likely to set large populations into motion. The results, however, have either not been tested on any large scale or not been made public (Thoolen, 1992). Moreover, the long list of indicators used by ORCI—which included information on the international, regional and internal situation—did not permit for comprehensive coverage, mainly because of the limited availability of data. The capacity of ORCI to detect and to forewarn, therefore was limited.

EXEMPLARY INTERNAL INDICATORS
Socio-political indicators
1. oppression/persecution of social groups
2. size internal security forces
3. occurrence domestic hostilities/conflicts
4. government policy toward tension
5. existence of separatist groups
Secondary factors (standard data collection)
6. demonstrations, strikes, riots
7. basic government and defense data
8. land ownership
9. population growth, density
10. basic food and health statistics
11. employment/unemployment
12. refugees and displaced persons
13. distribution wealth and income
14. per capita and GDP figures, inflation

Figure 26: Indication of ORCI indicators on conflict (in Dedring, 1992).

Relevance of the model for the policy context and a conflict and policy assessment framework
Although ORCI has not been able to develop a well-functioning early warning system, we can here draw on some 'lessons' as regards practical matters in the development of such a system or a conflict and policy assessment framework. The breakdown of the ORCI early warning capacity has been attributed to the lack of systematic research, its role within the UN system and high expectations of the

[30] Sources: Dedring, J. (1992) Socio-political Indicators for Early Warning Purposes, in K. Rupesinghe, M. Kuroda (eds.) *Early Warning and Conflict Resolution,* New York: St. Martin's Press, pp. 194-214; Gordenker, L. (1992) Early Warning: Conceptual and Practical Issues, in K. Rupesinghe, M. Kuroda (eds.) *Early Warning and Conflict Resolution*, New York: St. Martin's Press, pp. 1-14; Adelman, H., S. Schmeidl (1996) *Towards the Development of an Early Warning/Response Network (EWNET)*, http://www.yorku.ca/research/crs/prevent/-ewpro3.htm; Thoolen, H. (1992) Information Aspects of Humanitarian Early Warning, in K. Rupesinghe, M. Kuroda (eds.) *Early Warning and Conflict Resolution*, New York: St. Martin's Press, pp. 166-180; Adelman, H. (1998) Humanitarian and Conflict-Oriented Early Warning: A Historical Background Sketch, in K. van Walraven (ed.) *Early Warning and Conflict Prevention: Limitations and Possibilities*, The Hague: Kluwer.

[31] The underlying argument being that many international disturbances can arise out of strictly domestic developments or considerations.

system (Adelman and Schmeidl, 1996). Moreover, problems related to budget and personnel as well. “Consequently, at the beginning of 1991, ORCI was not even equipped with a suitable computer capacity, let alone a tested data base that was appropriate to the analysis that would lead to early warning”, Gordenker (1992) observes. Hence the experiences of ORCI imply that there is a need for a clear commitment to the project, but also a clear definition of its objective and realistic expectations. In its goals, but also in the indicator choice, ORCI was too general, broad, and unsystematic, which resulted in a quick loss of confidence in the project.

II. HEWS
Humanitarian Early Warning System[32]

HEWS is part of UN DHA and was established in 1993 to identify crises with humanitarian implications, to facilitate DHA's role in preventive humanitarian assistance and diplomacy. HEWS is often described as the only functioning contemporary early warning system. With an extensive database of qualitative and quantitative country information at their disposal (sources, amongst others, coming from the UN field offices), HEWS is "… a provider of background reports and analyses of present and developing situations" (Ahmed, Kassinis, 1998).

The setting up of HEWS as an early warning system was not an end unto itself, but rather, was part of a larger process to endow decision makers with the tools necessary to make better-informed decisions and to initiate actions. In the project proposal its scope of activity was defined as covering the range of social, economic, political, and ecological factors and root causes that could give rise to complex man-made emergencies, but also the building and maintaining of a sophisticated computer-assisted information gathering network to manage the large flow of information. Hence one of its tools, is an extensive database of country information, which includes reporting from various sectoral early warning systems (e.g. FAO, WFP, USAID on food availability). HEWS, then, uses a comprehensive list of indicators and tries to give as wide a description of a country or region as possible.

The monitoring of background conditions employs quantitative indicators to establish trends. Over a hundred structural indicators undergo an automated analysis, which, in combination with a more "subjective filter" (Ahmed, Kassinis, 1998), is used to short-list countries of concern. These countries of concern then will be monitored on the latest events reported on by media or field offices, and that may escalate tensions. The approach here is more dynamic, and includes qualitative analysis and country-specific indicators. Triggers of crises are hardly predictable, and it is only through scenario analysis and intensified monitoring that some lead time for contingency planning is created.

INDICATOR CATEGORIES[33]
1. population: changes and differences between various sections of the population
2. general economic indicators: GNP, government expenditure, employment
3. review of trade
4. financial position
5. situation regarding food and agriculture
6. social indicators
7. review of health and nutrition
8. environment and natural resources
9. review of number, origin, place of refugees
10. human rights
11. position of government
12. presence of (potential for) conflicts: internal, external, regional
13. presence of military and weapons
14. general background information: historic, geographical, cultural etc.

Figure 27: HEWS indicator categories.

[32] Sources: Ahmed, A., E. Kassinis (1997) The Humanitarian Early Warning System, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); R. Doom, K. Vlassenroot (1997) Early Warning and Conflict Prevention: Minerva's Wisdom?, http://www-jha.sps.cam.ac.uk/a/a008.htm; DHA-Online (s.a.) *Policy and Analysis: Humanitarian Early Warning System (HEWS),* http://www.reliefweb.int/ocha_ol/programs/pad/hews.html.

[33] In R. Doom, K. Vlassenroot (1997) "Early Warning and Conflict Prevention: Minerva's Wisdom?", http://www-jha.sps.cam.ac.uk/a/a008.htm

Hence three stages can be identified in the monitoring process:

I. *Background conditions*: the analysis is intended to be quick but global, and for this reason quantitative indicators and methods are used, as well as automated analysis. The list contains more than 100 structural indicators for twenty-five years. Analysts have the ability to graphically compare indicators over time and between countries, and they can rank countries based on various criteria.

II. *Accelerating factors*: identifying and monitoring factors that may escalate tensions. This requires a dynamic approach, because factors are less structured and demonstrate quicker movements. The unit of analysis for time therefore is shorter. An important element is the monitoring of the latest events reported by news wires, field offices, and NGOs. *Country-specific indicators* are developed in cooperation with field offices, which also require qualitative analysis. Concurrently, periodic, interdepartmental consultations are held to give the analysis a broader, multi-disciplinary perspective. A further narrowing down of countries takes place, to those that are on the threshold of crisis.

III. *Trigger incidents*: Possible trigger incidents may be determined through scenario analysis, others spotted by intensified monitoring.

Relevance of the model for the policy context and a conflict and policy assessment framework

With regard to practical relevance of the model, DHA argues that its approach "…falls somewhere between the academic and the practical—it keeps abreast of the latest developments in the academic fields related to early warning but recognizes that as part of the UN it must feed into a decision-making process driven by practical (and often political) considerations" (Ahmed and Kassinis, 1998).

Key is the *systematic* nature of country monitoring. The analysis is based on quantitative and qualitative information and accommodates both indicator-based and case-based approaches. Stages of intensity of conflict are used, in order to decide which countries need extensive monitoring. Criteria, however, are still needed to determine the *movement* of countries among these phases. In principle, HEWS is a provider of information to feed into the consultation process, in order to determine what actions need to be taken towards preventing crises, but also to prepare for their impact. In practice, HEWS is often applied in a context for coming to responses to humanitarian disasters. In this way it may contribute to preparedness, but only to a lesser degree to prevention.[34]

[34] Cockell (1997) attributes this to the vigorous opposition from the G-77 to political early warning systems. Conflict analysis for early warning purposes in the UN therefore remains "decentralized", "ad hoc", and a "desk-level exercise". The orienting purpose of HEWS, then, remains humanitarian intervention rather than a focused and standardized tracking of political instability.

III. Federal Ministry for Economic Co-operation and Development (BMZ) - Analytical Model for Violent Conflict[35]

The research of Angelika Spelten for the Federal Ministry for Economic Co-operation and Development had as its aim the development of an indicator model for use as an "… additional instrument for planning and analysis in development co-operation" (BMZ, 1998). The model distinguishes four stages of conflict[36], and implies that in each stage of the conflict it is possible to assess the probability of the social situation moving on to the next stage of escalation using certain developments as indicators. These indicators provide information that can be divided into structural issues, medium-term and short-term changes in the structural framework conditions, and political behavior in accordance with the main driving forces behind the dynamics of escalation. Hence the focus of the models is on stages and thresholds.

CENTRAL CONCEPTS IN HYPOTHESES OF THE BMZ MODEL
1. group identity and grievances
2. low level of legitimacy and effectiveness of the state
3. economic, political and social status changes
4. current constellations in conformation with the historical situation
5. diminishing number of fora for peaceful solutions
6. external support for group
7. increase in aggressiveness of putting demands, leading to a diminishing chance on negotiated solution

Figure 28: Indication of central concepts of BMZ model.

A questionnaire is developed that includes indicator questions based on hypotheses regarding causality between phenomena to be observed and probability of further escalation. The so-called catalogue of indicators comprises of three sections: The first section focuses on structural factors and the potential for escalation. The second one identifies foreseeable pressure for change and modernization, and the last one enables the monitoring of the potential for violence and *de facto* escalation.

The model, hence, focuses on three threshold values: a stable potential for conflict, a potential crisis escalation, and a high potential for crisis or violence. The first category refers to countries in which socio-political conflicts exist, but where these divergences have not yet led to social disputes and therefore do not currently require any further escalation analysis. The second category is for countries whose long-term structural disparities have already led to conflicts at the political level, and although these are not always pursued by violent means, state legitimacy and effectiveness has been jeopardized. It is in particular in this stage that conflict impact assessments need to be carried out in order to place the planning and implementation of development projects within the framework of a concept for conflict management an prevention. The threshold to the third category has been crossed, when there are strong indications that (one of the) conflicting parties is less interested in basic consensus, but instead pushes through particular interests. In this case BMZ advises a thorough redirection of development co-operation, concentrating it on strategies aimed at preserving the peace and preventing violence.

Determining intensity and stages of conflict

The analytical system that is used in the catalogue of indicators is divided into two sections. The first section covers questions under (A) and (B) (see figure 30) and enable an initial categorization between

[35] Sources: BMZ [Federal Ministry for Economic Co-operation and Development], A. Spelten (1998) *Excerpt from a Study "Crisis Analysis in Development Co-operation",* Room Document no. 2 Informal DAC Task Force on Conflict, Peace and Development Co-operation, Paris.

[36] Stage 1: relatively stable, violence-free with latent potential for conflict. Stage 2: manifest tensions, various structural factors and change coincide. Stage 3: dispute is translated into concrete collective action. Stage 4: extensive use of violence.

countries with a "stable potential for conflict" and "potential crisis escalation". If the latter is the case, then a more detailed analysis is needed, which takes place in section II. This section is to evaluate the potential for violence, to differentiate between countries with "potential crisis escalation" and "high potential for crisis or violence".

LIST OF TOPICS COVERED BY THE INDICATOR QUESTIONS	
A. Structural conflict factors and potential conflict	
1. Determining disparities in society in terms of economics, ecology, and political power: 2. Determining the social competence for dealing with conflict peacefully: 3. International and regional conflict factors:	• What social groups can be identified in a society? • What impact does the socio-cultural structure of society have on existing economic, ecological and political disparities? • How are social conflicts perceived and communicated? • Are state institutions willing and able to negotiate social conflicts and bring about solutions? • Do they have sufficient legitimacy to carry out this function? • Is there a danger that armed disputes will be imported from neighboring countries?
B. Medium or short-term changes in structural framework conditions	
4. Future changes in structural framework conditions and perceived threats born out of historical experiences: 5. Recording social clichés:	• What political strategies by international actors will lead to comprehensive political or economic reform in the country to be analyzed? • What are the forecasts for changes in the general ecological situation? • What violent disputes have taken place in the past between the social groups? • What role did various groups play in the colonial past, in founding of nation, in any earlier wars? • How have relations between the various social groups developed in recent past?
C. Political behavior in accordance with main driving forces behind dynamics of escalation	
6. Evaluating the social climate: 7. Changes in manner in which conflict is played out:	• In what fora is social life played out and who normally has access to these fora? • What is the traditional pattern of organization for the rural population? • What images are being developed in media, public speeches, songs, etc., or covertly by political opponents or by specific social groups? • What images of 'the enemy' exist? What style of political debate is used in the media? • What strategies do various parties in the conflict use to strengthen their powers of persuasion or their political influence?

Figure 29: Indication of topics covered in the BMZ conflict assessment framework (questionnaire).

Scaling on the intensity of conflict

The answers to the various questions in the questionnaire each have a value in points (1 or 2), with some having an additional "accelerator point" (which is illustrated by a plus sign). The total number of points and accelerators is added up at the end of each box (i.e. A.1., A.2. etc.), and is then compared with a pre-specified range of points given as indication of each of the three categories to establish a trend (e.g. "slight trend towards crisis: 4-5 points; "medium trend towards crisis: 6-8 points; "high trend towards crisis: 9-12 points).

At the end of the sections A, B, and C the trends from the sectoral analyses are summarized and entered into a *quantitative* evaluation system. Then it is possible to allocate the country to one of the

categories “stable potential for conflict”, “potential crisis escalation” or “high potential for crisis or violence”.[37]

Relevance of the model for the policy context and a conflict and policy assessment framework
The model is specifically designed for the policy field of development co-operation, as an instrument to plan and analyze development cooperation policy in the light of strategies aimed at preserving peace and preventing violence. It is, hence, not a forecasting device, but an analytical tool. Although mention is made of the need for conflict impact assessments, no further suggestions are made with regard to responses. Moreover, since the model is designed for the field of development co-operation, these responses are above all expected to be at the structural conflict prevention level. Spelten (1998) mentions that for the future it is planned to integrate the sections of analysis into the existing range of instruments of BMZ.

The model has strong similarity to the theoretical approach of Gurr’s Minority at Risk. The main emphasis is put on social groups, discrimination and disparities, and relative deprivation. The state and its behavior, actions, and policies are included in the model in a far less substantive way, and the focus is on the state and state institutions are perceived by the various groups. Although the model includes elements that are expected to give a good picture of the political culture in a country, the way in which it is presented (i.e. the framework) is less satisfying. For assigning clear-cut weights to the answers (1 or 2), the questions seem to be too general in nature. In this regard a scaling system from 1 to 10 or a continuum would have enabled a specification of the answer, but indeed would have complicated the workings of the quantitative evaluation system. Hence, it is in particular this quantitative evaluation that is considered to be the short-coming of the BMZ model for conflict potential assessment.

Second classification of the country: How many sectors indicate a “slight”, “medium” or “high” tendency toward crisis? Transfer the tendency figures from the sectoral analyses: “slight” “medium” “high”
Multiply the figure by 1 multiply by 2 multiply by 4
Indicator value:
Overall classification of the country: Transfer the above indicator value: - An indicator value of 3-8 corresponds to the classification potential crisis escalation - An indicator value of 8-12 corresponds to the classification high potential for crisis or violence. This still includes countries for which the criterion of a “de-escalation phase” (see above) applies
Qualified amended assessment: Would you, based on concrete information about developments not covered by this catalogue of indicators, classify the tendency of the country towards crisis differently? a. No b. Yes Reasons:
New classification of the country: Stable potential high potential Potential for conflict crisis escalation for crisis or violence

Figure 30: Example of the format of the BMZ quantitative evaluation system

[37] With regard to this method, Spelten (1998: 7) remarks: “In principle, it should be emphasised that the determining of threshold values for the evaluation of conflict potential is primarily a political task, which will also be guided by political priorities and the room for manoeuvre which the policies being pursued allow. Such analytical methods are only able at best to offer guidelines and describe trends, they do not have the precision of mathematical formulae.”

IV. The Fund for Peace – Pauline Baker Analytical Model of Internal Conflict and State Collapse[38]

In an effort to provide practitioners with a systematic methodology for early warning and assessment of divided societies at risk of violent upheaval, The Fund for Peace has developed an analytical model of internal conflict (by which is meant ethnic or identity conflict) [39] and state collapse[40]. It is designed for practical application in order to measure and monitor the likelihood of intergroup violence and state collapse, and to evaluate whether, and in what ways, the international community may contribute toward promoting peace. The aim of the model is also set at enhancing clarity of mission, unity of effort, inter-agency coordination, and implementation of transition strategies for sustainable security.

The model is based on the assumption that state failure is a primary cause of internal or ethnic conflict, not the reverse. It posits state building as the basis of a potential strategy for resolving or managing such conflict. The model therefore focuses on sustainable security[41] instead of the ending of violence or signing of peace agreement as a measure to determine when to wind down external peace operations. On the policy side, then, the model stresses the importance of building the core state institutions of police, military, civil service and system of justice. The model consists of a framework which tracks a conflict through five stages. Twelve indicators on ethnic conflict and state collapse are used, which may be evaluated with various data.

KEY INDICATOR CATEGORIES
A. Social indicators
1. Mounting demographic pressures
2. Massive movement of refugees or internally displaced persons creating complex humanitarian emergencies
3. legacy of vengeance-seeking group grievance or group paranoia
4. chronic and sustained human flight
B. Economic indicators
5. uneven economic development along group lines
6. sharp and/or severe economic decline
C. Political/military indicators
7. criminalization and/or delegitimization of the state
8. progressive deterioration of public services
9. suspension or arbitrary application of the rule of law and widespread violation of human rights
10. security apparatus operates as a state within a state
11. rise of fractionalized elites
12. intervention of other states or external political actors

Figure 31: Key indicator categories of Fund for Peace conflict model.

[38] Sources: Baker, P., J. Ausink (1996) State Collapse and Ethnic Violence: Toward a Predictive Model, in *Parameters* (Spring), pp. 19-31; Baker, P., A. Weller (1998) *An Analytical Model of Internal Conflict and State Collapse: Manual for Practitioners,* Washington, D.C.: The Fund for Peace.

[39] Internal conflict is defined in the model of Baker (1998: 9) as "any conflict or dispute based on communal or social group identity, including language, race, religion, sect, ethnicity, caste, class, clan, or some combination of these".

[40] A collapsing state in Bakers model (1998: 10) is "one that is losing physical control of its territory, forfeiting the authority to make collective decisions for the national population, lacks a monopoly on the legitimate use of force and cannot interact in formal relations with other states as a fully functioning member of the international community".

[41] Sustainable security may not be achieved by relying on an acceptable political framework that will mitigate conflict among internal conflicting factions. If state structures have collapsed or have been politically compromised by coming under the control of competing factions, then it will be necessary to combine the political framework with a strategy to rebuild the core state institutions.

Baker (1998) points out the methodological limits of her model. It should not be construed as a paradigm for all conflicts, nor should it be seen as a prescription for specific policies, a formula for predicting responses, or a mechanism for addressing questions of political will or national interest. She compares the methodological approach of her model to medical science, since it can be no more than making a diagnosis on the basis of "…the appearance of clusters of known symptoms, some of which are verifiable through testing, some merely observable by expert assessment" (1998: 14). The model therefore postulates clusters of leading societal indicators of state decay.

Determining intensity and stages of conflict

The conceptual framework identifies five stages and one major 'decision point' (whether the conflict will remain non-violent or become violent) between the stages two and three. In particular with regard to this decision-point, it is important to pay special attention to concepts of leadership, velocity of failure and the quality of peace. For the first two stages, the indicators may serve as early warnings. The stages three through five can be of assistance in policy assessments.

STAGES OF THE CONCEPTUAL FRAMEWORK	
Stage 1: Analysis of *root causes*	e.g. historical background, socioeconomic composition, environment that predisposes a society *towards fragmentation.*
Stage 2: Identification of *precipitating events*	e.g. discriminatory policies, collapsed empires, coups d'état or political assassinations that lead a state *from fragmentation to friction*.
Stage 3: *State transition*	State is in transition *toward becoming a new entity*. Transition may be violent (full scale conflict, secession, ethnic cleansing, disintegration) or non-violent (negotiations, reforms, power-sharing).
Stage 4: State *transformation*	A violent transformation may result in military victory, ethnic domination, warlordism, unresolved conflict. A non-violent transformation may result in elections, peaceful partition, conflict resolution, new state structures.
Stage 5: Outcome	Continuum between chaos and constitutionalism.

Figure 32: Five stages of conflict in the Fund for Peace conceptual framework.

Scaling on the intensity of conflict

Indicators should not be applied in a mechanistic way that ignores individual characteristics of a society. The intensity-assessment is rated on a scale from 1 to 10. For some indicators, this can be quantitatively measured, otherwise it could be an informed judgement.

Indicators Niwanda	**Application 1 1973**	**Application 2 1992**
1	0	1
2	0	1
3	5	6
4	0	1
5	5	6
6	0	5
7	0	5
8	0	5
9	0	1
10	0	5
11	0	5
12	0	1
TOTAL	10	42

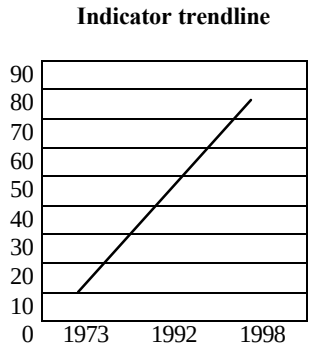


Figure 33: Trendline indicators of the Fund for Peace model (Baker, 1998: 42).

To establish the extent of danger, one must look at trend lines, by evaluating the frequency and intensity of the indicators over time. If these intensify, then the state is on the road to violence or collapse. In case of a diminishment, the state is on its way to recovery, which however does not necessarily mean that the root causes of conflict have been resolved. Collectively, the indicators provide a 'snapshot' of the condition of a state at one moment in time. Succeeding ones can be used to assess trends. Baker emphasizes the importance of constant monitoring on all twelve indicators, because a change in any one may affect the others.

Relevance of the model for the policy context and a conflict and policy assessment framework

The model is of specific significance by demonstrating the importance of a clear objective. For Baker, the target is establishing sustainable security (including the four core institutions, instead of only the political framework). The model has adopted a state-oriented approach, which is reflected in the choice on key indicator categories. In this regard, the model is clearly in line with the research findings of the Causes of Conflict in the Third World (CODW) research of Clingendael, that has demonstrated the central role of political institutions and state capacity in explaining conflict.

The Fund for Peace, however, remains too general in approach. One of main reasons for this is that it aims at providing a framework for broad application (diplomats, mediators, humanitarian workers, military commanders, representatives of governmental and international organizations, policy-makers). This complicates the effort to focus on particular response options. The reference that is made to responses and policy tools, consequently, remains very general.

Figure 34

V. Forum on Early Warning and Early Response (FEWER) Analytical Model for Early Warning and Response[42]

The FEWER consortium had as its purpose to set up an independent early warning system with the participation of various UN agencies, NGO's and other players and to elaborate strategic policy alternatives for decision makers. The rationale behind the establishment of the consortium was that no early warning models existed to collect information from various sources and at the same time present clear cut alternatives for action. The FEWER model therefore should allow for structured studies of complex disasters and violent conflicts.

FEWER has recently (December 1998) developed a manual for early warning and early response, which it considers to be a "…provisional framework for understanding trends in areas of potential and actual conflict, as well as identifying approaches for conflict prevention" (page 3). Yet, the manual may also be used as a tool to identify common ground and common strategies for peace among protagonists in a conflict situation.

The analytical model consists of two parts, the first one focusing on early warning and the second one on responses. According to the FEWER manual both parts of the model need to be used and get equal attention. It is also stressed that attention to the emergence of conflict and its management is not sufficient, Instead, the focus needs to be on conflict *and* peace, in order to be able to identify when opportunities for peace emerge, as well as how initiatives for peace can be supported.

Steps for *early warning* include, first of all, understanding the context by addressing issues as *what* factors contribute to conflict and peace, *where* is the conflict located, and *when* has the conflict or peace process started (all in terms of political, economic, socio-cultural and institutional terms). Key actors and their motivations should also be identified. Together, these factors establish the framework for analysis. The second step is the identification of conflict indicators to monitor the conflict dynamics and its development (see the list of indicators at the end of this description). A third step analyses the situation by categorizing the indicators as structural factors, triggers, or accelerators, and assessing the relative importance of the different indicators and their interrelationships. In a final step, opportunities for peace need to be identified. This means that the windows of opportunity for peacemaking need to be clarified, i.e. the events that could allow for peace initiative. Potential mediators and facilitators should be identified, as well as possible options and agenda items.

EXAMPLARY INDICATORS
A. Political indicators
1. human rights violations 2. internally-displaced peoples and refugees 3. military intervention in political affairs
B. Socio-cultural indicators
4. lack of access to mass media 5. discrimination on racial or ethnic grounds
C. Institutional indicators
6. failure of rule of law 7. weakness of state institutions 8. repression of civil society organizations

Figure 35: Some indicators suggested by FEWER.

The second part of the model focuses on steps for *response development*. First of all, instruments for conflict prevention need to be identified, and potential responses should be seen as an assimilation of

[42] Sources: FEWER (1998) *Early Warning Resource; Manual for Early Warning and Early Response,* FEWER: London.

multi-level policy options. Responses need to be listed internationally, regionally and locally, as well as located within three operational spheres (political, economic, and socio-cultural). In this way, response options should be identified that are unique to the situation, actors and the region. A second step in the analysis of responses is to identify potential peace actors and institutions (internationally, (sub-)regionally and locally). Then, in step 3, the responses need to be placed in a time frame, in order to transform the situation by stages. In a final step all possible response options are evaluated to understand the feasibility and sustainability of the responses proposed. This evaluation should take the following issues into consideration:

1. *What are the response consequences?*
   Better understanding of the potential impact on relevant parties, those directly and indirectly involved. Prediction on the type, size, timing and intensity of the effects.
2. *Who is for/against or neutral in relation to the response (power and priority)?*
   Analysis of the position of key actors, to predict the relative strength of support and opposition, and hence the viability of the response.
3. *What are the alliance configurations?*
   Mapping of direction and strength of influence among groups and organizations, in order to identify common agendas.
4. *What are the organizational/political changes likely to occur?*
   Analysis of opportunities to influence change, in an attempt to identify changing dynamics of the situation (e.g. change of leadership in an organization).
5. *What are the opportunities and possible approaches to effect changes?*
   Identify actions that may improve or reinforce the feasibility of responses (e.g. alteration of public perception, mobilization of institutional support and ways of responding to opposing factions).

Relevance of the model for the policy context and a conflict and policy assessment framework

Rather than being a model for standardized assessment and pre-specified monitoring on indicators of conflict situations, FEWER presents a framework for discussion. This follows from the objective of the model to provide an input for political decisions on conflict prevention. For this purpose, quantitative crisis indicators alone do not suffice. Hence, FEWER does not provide a generic model for conflict assessment, but a case-specific approach.

Although the model does not suffice as a framework for generic and standardized conflict assessment and prediction, it gives relevant suggestions as to what should be taken into consideration when developing a framework. In particular the part on response development contains interesting elements with regard to the evaluation of policy responses, instruments, and combinations of options.

Possible Indicators[1]

Structural Factors

Political

Military and security
- Security expenditure
- Growing illicit arms trade
- Number of private security firms

Unstable social structure
- Changing elites

Unwillingness to effectively govern
- Human rights abuses
- Constitutional abuses
- Abuses of power

Inability to effectively govern
- Systemic instability
- Unconsolidated power
- Illegitimacy
- Incomplete territorial control

Economic

Internal Economic Stability
- Prevalence of poverty
- Degree of unemployment
- Inflation/price stability
- Access to social security/welfare
- Pronounced social stratification
- Income disparities
- Land distribution

Environmental
- Agricultural failure
- Pollution
- Environmental disaster

Mismanagement
- Disparity and inequality
- Corruption

Instability
- Macro-economic instability

Socio-cultural

Media and propaganda
- Inflammatory statements
- Exploitation of divisions/tensions

Institutions and events

Religious institutions
- Antagonistic behaviour
- Propaganda

Police and judiciary
- Institutional bias

Institutional
- Lack of civil institutions
- Link between populous-government

[1] Drawn from the Africa Peace Forum, PIOOM Foundation, Russian Academy of Sciences/Institute of Ethnology, United Nations High Commissioner for Refugees/Center for Documentation and Research, and the University of Maryland

Accelerators

Political

Domestic insecurity
- Inability, on the part of the state, to deliver security and stability
- Security forces on the streets
- Inability to maintain territorial control
- Imposition of curfews

Population movements
- Civilian movement across border
- Restriction of movement into and out of the state
- IDP's and refugees

Political opposition/Government oppression
- Proliferation of opposition groups
- Frequency of political arrests
- Miniaturisation of dissent
- Problems processing dissent
- Disillusionment with security apparatus
- Dissatisfaction with the management of state affairs
- Unfulfilled expectations
- General despair (linked to justice, economic welfare, personal/family security)

Consolidation of opposition
- Increased opposition activity
- Increase in size and cohesion of opposition groups

Economic

International confidence
- Capital flight
- Foreign debt
- Currency stability
- Foreign exchange reserves

Economic decline
- Increasing poverty/ec. Disparity
- Food shortages

Socio-cultural

Ethnicity
- Ethnic tension/violence
- Historical rivalries
- Territorial disputes
- Antagonistic behaviour
- Institutionalised persecution
- Language laws

Triggers

Political

Human rights
- Freedom of expression
- Freedom of movement
- Freedom of religion
- Freedom of assembly

Integrity of elections
- Electoral fraud
- Voter intimidation

Internal political instability
- Changing alliances
- Purging of persons of doubtful loyalty
- Politically motivated arrests
- Dominant political positions/ideologies and their impact of peace and stability

Government policy
- New discriminatory policies
- Increased tension between regime supporters and opposition groups
- Mass human rights abuses

External intervention
- External support for opposition groups
- Threat of intervention

Cross-border activity
- Military build-ups
- Cross-border shootings

Levels of violence
- Political assassinations
- Political violence
- Ethnic violence

Figure 36: Potential indicators, included in the FEWER manual.

VI. FAST – Swiss Foreign Ministry Pilot Study for an Early Warning System[43]

FAST [Early Recognition of Tension and Fact Finding] is a pilot study for an out-of-government early warning center, functioning in close collaboration with the Ministry of Foreign Affairs of Switzerland. The early warning system should be in the interest of various departments of the Swiss Foreign Ministry: the General Secretariat, the section Peace Policies and OSCE, and the section Development Cooperation. The effort, undertaken by the Swiss Peace Foundation and funded by the Swiss Agency for Development and Cooperation, is described as "…an early warning chain-system going all the way from monitoring, collection and dissemination of information up to analysis, evaluation, risk assessment and finally presentation of policy options and scenarios credible enough to convince policy-makers about the need for early action" (Kohlschütter, 1998). As an applied early warning project it should make the warning-response link an integral part of its activities. Hence a system with several component parts was created "…that links the collection of information to analysis and analysis to policy recommendations" (Krummenacher and Schmeidl, *s.a.*). The key element of the system is said to be the fact that it is embedded into the political decision making process due to institutionalized access to high level decision makers, which should increase the likelihood of early action and conflict prevention.

OBJECTIVE OF 'FAST'	
1.	Instrument for facilitating effective preventive diplomacy
2.	Enabling the Swiss administration to recognize and act upon a crisis as early as possible
3.	Enhancing the "institutionalized pressure" for such early decision-making

Figure 37: Objectives of FAST.

The project is highly ambitious, as it describes the system to be

- Functional and operational on a rather short term basis, but also based on (computerized) early warning models and indicator clusters which lend themselves to constant refinement, scientific testing, and adjustments as needed by political practitioners;
- Multi-departmental, multi-purpose and multi-directional;[44]
- Structured and equipped so as to monitor and collect different levels and types of data;

The components of FAST, then, consist of: a time frame of early warning, with a focus on proximate or short-term conditions (3-6 months); an holistic approach to early warning, including pre-crisis, in-crisis, and post-crisis stages of conflict; armed conflict as a flexible dependant variable; and a multimethod approach to supplement quantitative with qualitative approaches.

[43] Sources: Kohlschütter, A. (1997) FAST: A Pilot Study for an Early Warning System for the Swiss Foreign Ministry, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); Krummenacher, H., S. Schmeidl (*s.a.*) *FAST: An Integrated and Interactive Early Warning System*, Swiss Peace Foundation Institute for Conflict Resolution, SDC Department of Foreign Affairs.

[44] Kohlschütter (1998): "…the data and information to be monitored and the geographical areas to be covered satisfying the early warning requirements of different agencies in the Swiss MFA. On the one hand there is the more globally oriented political department, looking after Swiss interests worldwide (trade, investments, migration, terrorism, proliferation, etc.) and concentrating on the 53 OSCE states, especially those in transition from communism to democratic civil societies; on the other hand, the more narrow and third-world-focused development cooperation agency which concentrates on some 16 focal countries with major foreign aid projects.

FAST EARLY WARNING CHAIN						
ACTIVITY	Assessing country background conditions	Choosing relevant conflict indicators	Monitoring flow of events (event analysis)	Risk assessment based on quantitative or qualitative research	Round table with policy makers	Monitoring of actions taken
PHASE	1	2	3	4	5	6
PRODUCT	Country risk profiles	Factsheets	Tension barometers	Risk assessment	Presenting policy options	Evaluation paper

Figure 38: FAST early warning chain, taken from H. Krummenacher and S. Schmeidl (s.a.).

Relevance of the model for the policy context and a conflict and policy assessment framework

The system's objectives and fields of operation are very extensive, and its operationalization appears highly complex. Moreover, since the system is supposed to function outside the structures of the Ministry (the end-user), the presentation of the warnings are of significance, and should be able to convince the policy makers. This differs from a conflict and policy assessment framework that is used within an organization, and provides 'in-house' (political) warnings. This however is described by Krummenacher and Schmeidl (*s.a.*) as the main relevance of FAST: it is a "one-of a kind" project and learning experience on the impact of direct access to policy makers on actual response to other early warning systems.

FAST includes a large number of methodologies and techniques to provide policy makers with early warnings. With the various objectives, different users, wide variety in policy fields, and global coverage in mind, we are afraid that the system cannot be more than very general in its assessments and response recommendations. Although direct access may exist between academics and policy makers, this appears to be the case in a 'producer'-type relationship, in which the results are presented to the policy makers. Whereas it may provide an important learning experiment on how access to policy makers impacts on early responses, we think the high level of ambition provides an argument as well for the necessity to be very specific on the objective, the user and the policy instruments, in order for the framework to hold operational value.

VII. Canadian Peacebuilding Initiative Strategic Framework[45]

The Canadian Peacebuilding Initiative dates back to October 1996, and was initiated by the Department of Foreign Affairs and Trade (DFAIT) and the Canadian International Development Agency (CIDA). The emphasis is put on peacebuilding[46] and human security. Whereas the overarching goal of peacebuilding is to enhance the indigenous capacity of a society to manage conflict without violence, it ultimately aims at building human security,[47] a concept which includes democratic governance, human rights, the rule of law, sustainable development, equitable access to resources, and environmental security. Hence, the focus is on the political and socioeconomic context of conflict, rather than the military or humanitarian one, and has as its aim to institutionalize peaceful resolution of conflict. In this regard, it should be noted that the effort is very general in nature, directed at a broad policy framework and structural conflict prevention.[48]

The Initiative has selected four specific topics for further policy development: small arms proliferation, gender dimensions of peacebuilding, free media development, and the impact of armed conflict on children. In the area of preparedness, the Initiative focuses on "identifying and assessing Canadian peacebuilding capacity and training skills", "enhancing and promoting peacebuilding knowledge in Canadian academic and research facilities", "developing a stand-by Canadian peacebuilding capacity, ready for deployment", and "conducting ongoing analysis of conflict situations to allow Canada to define priorities and pinpoint interventions on a proactive basis" (DFAIT, 1998).

For some years, John Cockell has been involved in the work at DFAIT, and he has focused his attention on conflict assessments for use in the policy context, in a call for more response-oriented warnings and an action-oriented approach. In this approach, the focus should be on how and why there is a potential for escalation, as a first step to identifying priority areas for preventive engagement. In short, response-oriented analysis should address issues of strategic targeting and the process link, in order to have an interactive relationship between the analytical framework and the operational response policy-making mechanism.

However, the work has mainly been done on a personal title. Cockell is currently involved in early warning policy development and training for the UN department of Political Affairs, and the UN Staff College, in a project called "Early Warning and Preventive Measures: Building UN Capacity". It is based on an applied policy planning approach to linking early warning analysis with UN capacity for preventive measures.

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[45] Sources: Cockell, J. (1997) Peacebuilding and Human Security: International Responses to the Politics of Internal Conflict, draft for discussion; Cockell, J. (1997) Towards Response-Oriented Early Warning Analysis, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); DFAIT [Department of Foreign Affairs and International Trade] (1998) Canada and Peacebuilding; The Canadian Peacebuilding Initiative, http://www.dfait-maeci.gc.ca..

[46] Peacebuilding may involve conflict *prevention*, conflict *resolution,* and *post-conflict activities*.

[47] The Fund for Peace is even more specific by focusing on *sustainable security*, clearly directed at the state and the core institutions.

[48] See also K. van Walraven (1999) Conflict Policy in Some Western Countries: Some Explorative Notes, *Clingendael Occasional Paper*, The Hague: Clingendael Institute.

SUGGESTIONS FOR AN EARLY WARNING ANALYTICAL FRAMEWORK	
SUGGESTIONS ON CHARACTER OF FRAMEWORK:	• Find a balance between a general model and detailed case specificity
	• Region-specific analytical frameworks in concert with regional capacity-building for preventive action
	• Focus on near-term trigger, rather than broader background factors
	• Information sharing in order to use field proximity of specific organizations to full advantage
SUGGESTIONS ON INDICATOR CATEGORIES (WITH A FOCUS ON THE OVERLAP AND DYNAMIC INTERACTION):	• status of governance/political process • polarization/potential for conflict • structural/societal tension • human rights violations • military/arms supply • external support • other context-specific factors

Figure 39: Source: Suggestions put forward by Cockell (1997) for an analytical framework for early warning.

VII. Creative Associates International, Inc. A Toolbox to Respond to Conflicts and Build Peace[49]

The work of Creative Associates International, Inc. (CAII) is strongly directed toward the response side of conflict prevention, as is suggested by use of the term 'toolbox'. The 'Guide to Practitioners' and its revised version is developed at the request of the Greater Horn of Africa Initiative, and executed by a multi-disciplinary team of regional experts, and specialists in conflict prevention, policy analysis, economics, democracy-building, civic society and development. The revised version furthermore has benefited from feedback from policy-makers and practitioners.

The most interesting part of the guide is indeed the one that focuses specifically on the toolbox. A broad array of policy interventions and instruments to prevent or mitigate conflict is analyzed, in particular in the context of the Greater Horn of Africa. Further, the guide examines the development of conflict prevention strategies and "…offers guidelines on how to build on an understanding of policy tools to develop coherent multi-tooled strategies to prevent or mitigate conflict, including the goals, tasks and issues in planning and implementing conflict prevention strategies", as the guide indicates.

The toolbox is developed as an attempt to address present shortcomings in established programs, which inhibit conflict preventive capabilities. This first of all is caused by often insufficient budgetary, staff and other resources. More importantly to address here, are the shortcomings in analysis of and approach to the conflict. These include for example: a dominant crisis—instead of prevention—orientation, a state-to-state focus, a focus on armed conflict as the cause of conflict, an inadequate link between general development assistance and conflict prevention, and detection without enforcement. The work on early warning indicators and preventive mechanisms is criticized for its gaps in the response structure, its fragmented coverage, inadequate knowledge and feedback, and the neglect of existing prevention mechanisms.

CAII offers a systematic approach that specifies objectives, policy tools and timeframes for action, and offers an eight-step approach:

CAII EIGHT-STEP APPROACH	
1. Track national transitions	Understanding of the sources and nature of local conflicts
2. Set goals	Choose strategic priorities and establish goals and objectives
3. Assess national needs and tasks	Policy-makers must pinpoint key policy sectors, and tasks to reach the specified goals
4. Choose tools	Determine the mix of policy options each goal requires, assess the effects, and determine where new initiatives must fill gaps
5. Identify implementing partners	Determine which internal and external partners may best implement policy interventions
6. Time interventions	Policy options vary according to stages of conflict, and some must be sequenced
7. Coordinate responses	Spell out actors' responsibilities and mandates
8. Plan the exit strategy	Define criteria for disengagement

Figure 40: The CAII eight-step approach to conflict preventive interventions.

The analysis is organized by the stage of conflict (stable peace, unstable peace, crisis, war, post-conflict crisis, post-conflict unstable peace, and reconciliation), and for each stage a separate framework is developed that includes illustrative issues as regards the environment for interventions, the timeframe for action, the primary objectives, and policy tools.

[49] Sources: Creative Associates International, Inc. (1998) *Preventing and Mitigating Conflicts: A Revised Guide for Practitioners*, http://www.caii-dc.com/ghai

The tools, as indicated in figure 41 are then assessed, following the format of a *description* of the tool (objectives, expected outcome or impact, and relationship to conflict prevention), a discussion of the tool's *implementation* (organizers, participants, activities, cost considerations, set-up time and timeframe), a summary of the *conflict context* in which to apply the tool (stage and type of conflict, cause of conflict, prerequisites for effective implementation), an in-depth illustration of *past practice*, and an *evaluation* of the tool (strengths, weaknesses and lessons learned).

POLICY TOOLS INCLUDED IN THE ASSESSMENT BY CAII
a. Official Diplomacy
Special envoys
b. Non-Official Conflict Management
Non-official facilitation Peace commissions Indigenous conflict management
c. Military Measures
Confidence and security-building measures Military professionalization and reform Military restructuring and integration Military demobilization Preventive deployment
d. Economic and Social Measures
Conditionality Sanctions and embargoes Economic and resource cooperation Humanitarian assistance Development assistance Power-sharing arrangements National conferences Political institution-building Electoral assistance Civic society-building
e. Political Development and Governance
Decentralization of power Judicial/legal reform Police reform War crimes tribunals/truth commissions
f. Communication and Education
Peace media Media professionalization

Figure 41: Tools that are assessed by CAII (1998).

Relevance of the model for the policy context and a conflict and policy assessment framework

The Guide holds a lot of interesting information for the development of a conflict and policy assessment framework, in particular as a result of its response orientation. The extensive assessment of policy tools may even be said to be novel. However, due to the general nature of the guide, which is said to be for "practitioners", it cannot come to specific suggestions of a framework and therefore remains largely illustrative. The Guide further provides a larger framework that includes 8 'steps' to take before coming to actual intervention. The inclusion of setting goals and defining tasks enables the framework to become more specific and realistic. Since the focus of this 'model' is on policy tools, the actual conflict potential assessment—as was the main focus of the major part of the here included prognostication models—is developed to a lesser extent. Indeed, the emphasis is on how to respond effectively (whether proactive or reactive) instead of how to anticipate.

IX. State Failure Project Phase II Policy Recommendations[50]

Whereas the first phase of the State Failure Project, as described in the previous chapter was a search for viable generic indicators for state failure, the second phase of the project was directed towards refining and specifying the generic model. This was done by testing the importance of the indicators, and applying the model to the Sub-Saharan African context. Whereas the generic model held its value, it was agreed that further refinement could be made by including additional dimensions[51].

Also a closer examination was undertaken on the democracy dimension. As the task force (1998: viii) reports, "[a]mong the most interesting results from this model was that partial democracies were on average 11 times as likely to suffer severe political crises than autocracies, and that, even in Sub-Saharan Africa, having a more urban population increases the risk of state failure only in poorer states".

From the findings, the Task Force infers some policy implications, that ask for a mix of context-specific policy responses:

- Involvement in international trade is associated with a lower risk of state failure in virtually all states and all contexts.[52]
- Partial democracies—particularly in lower-income countries where the quality of life remains poor—are associated with elevated risks of failure.
- Material living standards have an undeniable effect on the risks of state failure.
- Despite the prevalence of ethnic conflicts—especially in Sub-Saharan Africa—ethnic discrimination or domination is not the sole, or even the most important, correlate of state failure.
- Environmental stress, vulnerability, and capacity form an interdependent triad that affects quality of life, and, indirectly, the risk of state failure.
- Newer democracies, especially in countries where quality of life is relatively low, are more likely to fail than long-lived ones.

For future research, the task force indicates:

- Forming a better understanding of the conditions of successful democratic transitions.
- Further developing the concept that the impact of environmental degradation on state failure is mediated by vulnerability and capacity[53], and more thorough testing of the model.
- Developing a more detailed concept of 'state capacity' to test as a mediating factor in general and regional models.
- Investigating the usefulness of pilot studies of event data for bridging the gap between model-based risk assessments and early warnings.
- Investigating the impact of international support on the risk of state failure.

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[50] Sources: Esty, D., J. Goldstone, T. Gurr et. al. (1995) *Working Papers State Failure Task Force Report;* Esty, D., J. Goldstone, T. Gurr et. al. (1997) The State Failure Project: Early Warning Research for U.S. Foreign Policy Planning, in J. Davies, T. Gurr (eds.) *Preventive Measures: Building Risk Assessment and Crisis Early Warning Systems*, Colorado: Boulder (manuscript); Esty, D., J. Goldstone, T. Gurr et. al. (1998) *State Failure Task Force Report: Phase II Findings.*

[51] For the regional model, this included indicators on urban share of the population; type of colonial heritage; and the presence of ethnic discrimination.

[52] However, it is not the eventual prosperity that trade provides, but the involvement in international trade itself that is the key to this effect. This is a result of the observation that free trade helps bring together coalitions of elite actors that support the rule of law and stable property relationships (Solingen in State Failure Project, 1998: 29).

[53] Task Force (1998: 23): "Vulnerability is the degree to which crop yields might be expected to fall in the absence of effective intervention. It might be measured through extent of irrigation or sensitivity of crops to rainfall. Capacity is the degree to which the government and social actors are able to lower the actual impact, and might be measured as the size of the government budget, number of scientifically trained experts, or extent of communications infrastructure.

Relevance of the model for the policy context and a conflict and policy assessment framework
The State Failure Task Force has tried to refine the concept of democracy and its role in conflict development. The importance of intensity has been included by focusing on partial democracies (i.e. *partial* democracies being more likely to suffer state failure), and the time aspect is emphasized by including a time frame of democracy being established (i.e. *newer* democracies being more likely to suffer state failure).

The Task Force also emphasizes the importance of developing conflict impact assessments in order to better trace the effect of international interventions on the risk of state failure.