

# Event Data on Armed Conflict and Security (EDACS)<sup>1</sup>

## Codebook<sup>2</sup>

Version 3.7

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## **1. Introduction**

As part of the Research Center “Governance in Areas of Limited Statehood: New Modes of Governance?” (SFB 700)<sup>3</sup>, the project *Event Data on Armed Conflict and Security* (EDACS) collects, integrates, and analyzes data on the intensity, dynamics, location, actors and structural conditions of armed conflict. In order to explain the evolution and demise of armed conflict and security in areas of limited statehood, EDACS uses a temporally and spatially disaggregated approach. This enables the researcher to differentiate and analyze violent and non-violent areas of limited statehood as well as secure and less secure periods of time. If we define security narrowly as the absence of acute physical threats to individuals or groups and the prospect of survival, then we expect to observe spatiotemporal variations and hybrid forms of security even under the conditions of violent conflicts and state failure. Therefore EDACS contributes both to the recent debate on disaggregating armed conflict and violence (Cederman et al. 2007; Buhaug & Rød 2006; Gilmore et al. 2005; Raleigh & Hegre 2005; Buhaug & Gates 2002) and on the governance problematique (Risse & Lehmkuhl 2006). The project especially focuses on the question where and under what conditions security governance is established and how it is sustained.

## **2. Advancing and accumulating the disaggregated study of civil war**

EDACS accounts in particular for conflicts between two or more non-state armed groups. This approach pays tribute both to changing patterns of warfare and to violence in areas of limited statehood, where governmental actors gradually lose or even lack the monopoly over the means of violence (Reno 1998; Kaldor 1999; Jackson 2003). We use the Consolidated List of Wars (CoLoW) (Chojnacki & Reisch 2008) as a starting point for case selection, which includes sub-state wars between non-state actors.<sup>4</sup> We select “cases” of areas of limited statehood according to two criteria from that list: high intensity conflicts and situations of extreme state failure. EDACS collects data on war-torn areas of limited statehood in Sub-Saharan Africa between 1990 and 2009 (Somalia, Congo-Brazzaville, DR Congo, Liberia, Sierra Leone,

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<sup>3</sup> The SFB 700 focuses on “new” or hybrid modes of governance in areas of limited statehood and integrates four divisions of research projects: *theory building* (A), *political authority and rule making* (B), *security* (C), and *welfare and environment* (D). All projects assume that in areas of limited statehood the capacity of the state to enforce central decisions and its monopoly on the legitimate use of physical force is contested or lacking.

<sup>4</sup> The sub-state war category reflects the debate about the changing patterns of warfare in the post-Second World War period and follows the underlying rule that a classification of war is best arranged according to the political status of the protagonists (see, similarly Sarkees/Singer 2003). In consequence, wars between private armed groups can be made accessible for both empirical and systematic analyses (concerning their occurrence, duration, and correlates) and for comparative purposes (in relation, for example, to intra-state and inter-state wars).

Burundi, and Rwanda). This enables us to conduct quantitative and comparative analysis for the period from 1990 to 2009.

## **2.1 Events**

The unit of analysis in the EDACS dataset is a single event which is defined as a violent incidence at a specific location with at least one fatality resulting from the direct use of force. For each event, the dataset contains detailed information on (1) *date, intensity and type of military action*, (2) *actors and targets*, and (3) the *geographic location* of various regions, cities and roads which are identified locations of violent events.<sup>5</sup> Thereby, the project disaggregates the dynamics of violence temporally and spatially and gives information about varying actors and conflict intensity-levels.

### *Temporal dimension*

Disaggregating civil war data in time aims at identifying patterns of escalation and de-escalation relative to the absolute number of casualties as well as the frequency and regional diffusion of violent events. Most events are assigned a single date according to the sources. Incidences lasting longer than one day are provided with a start- and end date.

### *Number of victims*

For every event a minimum and a maximum count of fatalities is given, and whenever possible the dataset provides a differentiation between civilian and military casualties. This approach leaves behind the problem of defining thresholds (Collier & Hoeffler 2001; Sambanis 2004) as we operate with continuous numbers of deaths.<sup>6</sup> Nevertheless, it is open to users to apply their own threshold criteria in order to make a distinction between defined levels of armed conflict and war.

In case the source summarizes fatalities for two or more events at the same time but at different locations and there are no further reports specifying the count of fatalities, the overall fatalities count will

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<sup>5</sup> Raleigh and Hegre (2005) have developed a similar approach, but provide no information on the intensity of single events and on the complex interactions between non-state armed groups.

<sup>6</sup> Taking debates on intentional vs. unintentional killings seriously, we decided on coding unintentional killings as well – the practical reason being that in some cases it is almost impossible to distinguish whether killings were intentional or not. Imagine an article reporting that six people were killed in cross fire. It is hardly possible to decide whether these people were targeted or not, as it might be part of a strategy to be especially ruthless sparing no lives whether civilian or military. The theoretical argument is closely related to the practical one. Differentiating between intentional and unintentional killings would be based on the assumption that it is possible to infer an actor's intentions from his or her behavior. We doubt that this kind of inference can be made with the methodological approach taken in our and many other studies.

be equally divided among split events in different locations. In that case rational numbers as count of fatalities are possible in the EDACS dataset.

The differentiation between military and civilian fatalities proves difficult. Nevertheless, it is of central importance since it allows the analysis of different strategies and tactics of violence, and to draw preliminary conclusions about the security situation for the civilian population. In EDACS, *military fatalities* are defined as armed members of a collective social entity<sup>7</sup> or members of its command structure or unarmed (but active) members of organized groups killed as a result of the direct use of armed force. Unarmed (but active) members count only if they are killed during ongoing (para)military and/or police operations.<sup>8</sup> Consequently, *civilian fatalities* are all casualties to which the definition of *military* casualties does not apply.<sup>9</sup>

### *Fighting and One-Sided Attacks*

In order to analyze different dynamics of armed conflict and different forms of violence in areas of limited statehood, EDACS contains data on two types of violence: *fighting* and *one-sided attacks*.

*Fighting* is defined as armed interaction between two or more organized groups. We define one-sided attacks as direct unilateral violence by organized groups aimed at civilian or military targets. This definition is dissimilar to the Uppsala Conflict Data Program's (UCDP) concept of "one-sided violence" (Eck & Hultman 2007). UCDP defines one-sided violence as "the use of armed force by the government of a state or by a formally organized group against civilians which results in at least 25 deaths per year" (Eck et al. 2004: 136). The main difference is that one-sided attacks in our dataset can also be directed at military targets. The idea is to keep the type of target and the type of violence separate. Road side bombings, suicide bombers, or massacres would therefore be one-sided attacks regardless of who is targeted. Through this approach we hope to distinguish between tactics and strategies different actors use in conflict affected regions across time.

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<sup>7</sup> A collective social entity is a social unit of three people or more established on a continuing basis, which has violent means at its disposal and/or uses violent means to reach a common goal and/or carries out defined tasks. Indicators for a continuing basis are hierarchy (leader identifiable), other organizational structure and/or group name. We use the terms "social entity" and "group" interchangeable.

<sup>8</sup> Indicators for military fatalities are statements about victims stationed in barracks, wearing uniforms or armed at the time of attack. If no military job description is given, we code the fatalities as "unclear".

<sup>9</sup> Indicators for civilian fatalities are statements about unarmed victims, or statements containing a certain job description of the victim such as aid worker, doctor, journalist, peasant, diplomat, teacher, administrative official etc. The location, family affiliation, age or gender (e.g. "his wife, grandfather and children", "people in the church", "women") of involved actors is insufficient indication for the category "civilian".

## **2.2 Actors and Targets**

EDACS differentiates between violent and non-violent actors. As a consequence, the dataset enables researchers to identify civilian targets (primarily in cases of one-sided attacks against civilians).

*Violent actors* are defined as organized groups or collective social entities using directed force in the course of an armed conflict. This definition not only includes political-based entities such as states or rebel groups, but also warlord systems, private military companies or population-based self-defense groups. The sole criterion is the use of directed force.

*Non-violent actors* do not use directed force themselves. They can be members of organized or population based groups. Organized groups can be domestic (e.g. parties, NGOs, or coalitions) or international (e.g. United Nations, International Red Cross, or humanitarian aid organizations) – as long as they do not use directed force against other actors.

The categorization of certain actors as violent or non-violent is closely linked to the period of observation, as an actor might be solely the victim of violence during one period of time while taking violent action during another period.

## **2.3 Location of Violent Events**

Every event is coded with regard to its geographic location, making spatial analysis possible. The project identifies cities, villages, regions, and similar information on the location of violent events. With the help of a dataset on locations and their latitude and longitude<sup>10</sup>, this information can be used in *Geographic Information Systems (GIS)*.

## **3. Event Data Collection**

In order to ensure intersubjectivity and replicability of the collected data, all event data is coded from a defined set of publicly accessible sources. EDACS uses LexisNexis<sup>11</sup> as searchable news gateway that allows for a keyword search in newspapers and online news services. Information on past events is easily accessible and the download of searched material is possible.

We use three international newspapers as primary sources: The New York Times, the Washington Post, and the Guardian. This has several advantages: First, established international newspapers have their

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<sup>10</sup> Provided by the US National Geospatial-Intelligence Agency's GEOnet Names Server (GNS) (<http://earth-info.nga.mil/gns/html/>).

<sup>11</sup> LexisNexis can be accessed via: <<http://www.lexisnexis.com>>

own network of correspondents. Second, they have a subscription to all major news agencies, and third, they yield the most results for searches on violent events. Our primary sources are completed with the rich data from BBC news services. “BBC Monitoring” offers highly valuable information on local events compiled from local radio and other news sources, and thus provides helpful insights to conflict events which do not make it into the major international newspapers. In case information or data on one of our central variables (location and timeframe of event) is missing or inconsistent, the four mandatory sources can be supplemented by additional sources such as other news services (Alertnet, IrinNews, CrisisWatch Database, Human Security Gateway), and regional internet gateways (AllAfrica.com, Africa Confidential, Reliefweb).

### *Search Criteria*

In order to identify relevant events, the EDACS project uses different keywords for searching the news articles. Two criteria are especially important to us. On the one hand we want to concentrate on a manageable number of articles, while on the other hand we do not want to miss relevant data. Simply searching for a country name often leads to a very high number of articles including many which are irrelevant to the project. Therefore we have selected seven keywords, which are used in a LexisNexis search in the above mentioned four mandatory sources in combination with the country name. These keywords are **victim!, casual!, kill!, dead!, death!, die!, fatalit!**.<sup>12</sup> They have proven to filter the relevant articles minimizing the ones which are of no concern for our project. All collected articles are available at LexisNexis for reliability checks by researchers wanting to use our data.

## **4. Coding Procedure**

To guarantee objectivity of data collection, standardization of the coding procedures is of main concern for our project (see Figure 1). We have developed a data entry mask guiding the coding of each event. The coders of our project are trained to use this way of data entry, ensuring a highly identical coding procedure for every event across cases.

The first step is to identify the number of fatalities. In accordance with the one-fatality-criterion, incidences of fighting or violent attacks which do not result in fatalities are not considered further. Next, it has to be determined whether the fatalities are military, civilian or a combination of both. After the

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<sup>12</sup> In LexisNexis, the exclamation mark is used as a wildcard for one or more characters. Therefore, the keyword “kill!” will also search for “kills”, “killed”, “killing”, and so on.

coding of fatalities a short qualitative description of the event should be given and the news source indicated. The next step is to identify the exact or estimated date of the event.

To get a better idea about the character of the event, the coders have to decide whether the event has to be considered as fighting or one-sided violence. If the event is coded as fighting, it is necessary to code further information on the participating violent actors. In case the event is identified as a one-sided attack, not only information on the violent actors, but also on their targets (non-violent actors) has to be given. Furthermore, one of several subcategories of one-sided violence has to be coded.

In a next step, the location of the event must be determined. Coders browse the source articles for any information on geographic locations and record it in plain text. Additionally, they can choose from a predefined list of location names for each country which have been collected from the GNS country file. This list also includes longitude and latitude of the centroids of administrative units for each country, allowing the localization of events where only such information is available. The centroids are generated using GIS software, and also include a location buffer derived from the approximation  $r = \sqrt{a/\pi}$ , where  $r$  is the buffer and  $a$  is the area of the administrative unit.

In case the source article provides information such as “X kilometres from” a particular locality, the coder selects the mentioned locality and additionally enters an event specific buffer that defines the radius (in km) of the area around the location in which the event took place. For area specifications like “near”, “in the area of” or “not far from town X”, event buffers are created according to country-specific buffer rules.<sup>13</sup> For events in which the location name cannot be found in the GNS list or spatial information is somewhat imprecise (such as “located between town X and junction Y”), all geographic information is recorded in plain text. These events are then localized in GIS by geographically adept coders, using spatial information available from other sources.

### *Bias*

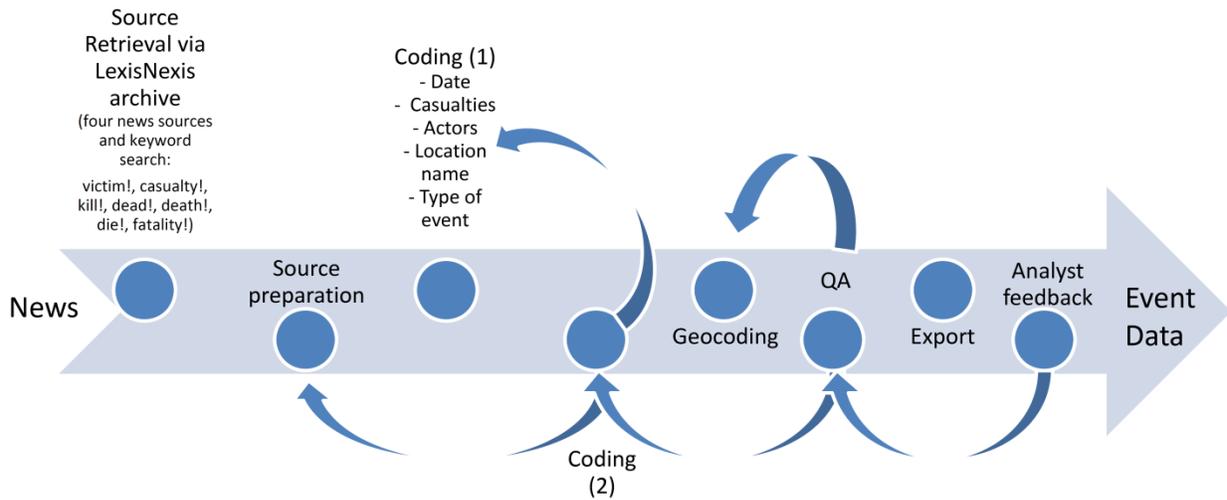
In order to assess the quality of information given in the sources, two types of bias are used in EDACS. If an event is reported by a source directly connected to a violent actor involved in the respective event (e.g. rebel radio, government statements), the coder selects *bias 2* (event-participant). If an event is reported by a source connected to the conflict in general but not directly involved in the respective

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<sup>13</sup> See Chojnacki et al. 2012 for additional information about the distinction between buffer of location and buffer of event.

event (e.g. fighting between competing rebel factions as reported by state media), the coder selects *bias 1* (conflict-participant).

## Coding Procedure



**Figure 1: Coding Procedure**

## 5. Actor List

The Actor List includes violent as well as non-violent actors. The collection of precise information is complicated by the fact that it is in some cases impossible to exactly name the groups taking part in an event. We have therefore established categories which account for groups that cannot clearly be identified. These categories are presented in Table 1 below.

The ActName0 can be coded as an abbreviation for the armed group if this abbreviation is in common use (e.g. UN, RUF, LRA). If such an abbreviation does not exist, the ActName0 has to be coded without blanks and in a more descriptive manner (e.g. FarahAidid; BakassiBoys; UgandanGunmen). All further information is coded under ActDesc0 (e.g. Militia under the command of Farah Aidid; Members of the Bakassi Boys; unidentified Ugandan gunmen).

## 6. EDACS Variables

In the following all variables and coding rules are listed. All templates specifying how data is entered by the coders are shown in quotation marks and italics.

**Table 1: Event Data Variables**

Name	Description
idEvent	Event ID
Countrycode	Countrycodes are taken from Gleditsch & Ward (1999)
Country	Name of first-level administrative unit of event location (only current administrative units used).
Location	Geographic location of the event (town, village)
Lat	Geographic latitude of event location
Long	Geographic longitude of event location
BufferEvent	Buffer of event location in km For event locations this is calculated using the approximation $r = \sqrt{a/\pi}$ . For other locations, the buffer is derived using location description and GIS. Fixed buffer ranges are determined beforehand for each country, depending on the country size.

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BufferLocation	<p>Buffer of location in km</p> <p>For administrative units this is calculated using the approximation <math>r = \sqrt{a/\pi}</math>. For other locations, the buffer is derived using location description and GIS. Fixed buffer ranges are determined beforehand for each country, depending on the country size.</p>
TrsBndry	Events taking place across national borders are coded as transboundary
LocDesc	Location description
Start End	<p><b>Exact date:</b></p> <p>Date of event is coded “<i>day.month.year</i>” (e.g. DD.MM.YYYY) using a calendar function in the data entry mask</p> <p>Incidences which last more than one day are coded by their start and end date (e.g. 02.02.2006 – 07.02.2006)</p> <p><b>No exact date:</b></p> <p>In case no exact date is given in the source, the best estimate of event start and end is given</p>
DateEst	<p>Indicates whether the date of the event is precise or an estimate</p> <p>0 = precise date</p> <p>1 = estimated date</p>
StartDesc	Plain text description of event date estimate (e.g. mid-June, last week)
Type	<p>Type of military action</p> <p>1 = one-sided attacks</p> <p>2 = fighting</p> <p>3 = unclear</p>
TypeDesc	<p>Type of one-sided attack according to tactics and weapons used</p> <p>1 = Conventional use of force</p> <p>2 = Use of small firearms</p> <p>3 = Use of hand-held non-firearms</p> <p>4 = Suicide bombings</p> <p>5 = Landmines</p> <p>6 = Other</p> <p>7 = Unclear</p> <p><i>Conventional use of force:</i> acts of violence resulting in fatalities using conventional tactics and heavy weapons (such as airstrikes, artillery, helicopter attacks, cruise missiles, tank attacks, rocket-propelled grenades)</p> <p><i>Use of small firearms:</i> acts of violence resulting in fatalities using handguns, rifles,</p>

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	<p>light machineguns</p> <p><i>Use of hand-held non-firearms:</i> acts of violence resulting in fatalities using hand-held non-firearms such as machetes or clubs</p> <p><i>Suicide bombings:</i> fatalities incurred through suicide bombings</p> <p><i>Landmines:</i> fatalities incurred through land mine explosions</p> <p><i>Other:</i> other types of arms or tactics</p> <p><i>Unclear:</i> acts of one-sided violence with no information on types of arms or tactics involved. Generic descriptions like “massacre” or “ethnic cleansing” are to be coded as <i>Unclear</i>, if the weapons used are unclear.</p>
EvDesc	Event description (Brief description of the event)
FatEst	<p>Fatalities estimate</p> <p>0 = no estimate</p> <p>1 = estimate</p>
FatDesc	Brief description of fatalities from source and/or notes regarding fatalities of event (e.g. reason of bias, split event)
FatMn	<p>Fatalities minimum<sup>14</sup></p> <p>Lowest number of deaths indicated in the sources</p>
FatMx	<p>Fatalities maximum<sup>14</sup></p> <p>Highest number of deaths indicated in the sources</p>
FatCivMn	<p>Civilian fatalities minimum<sup>14</sup></p> <p>Lowest number of civilian deaths indicated in the sources</p>
FatCivMx	<p>Civilian fatalities maximum<sup>14</sup></p> <p>Highest number of civilian deaths indicated in the sources</p>
FatMilMn	<p>Military fatalities minimum<sup>14</sup></p> <p>Lowest number of military deaths indicated in the sources, including victims of government forces (including police forces), rebels, warlords, paramilitary, local militias, self-defense-units, PSCs</p>
FatMilMx	<p>Military fatalities maximum<sup>14</sup></p> <p>Highest number of military deaths indicated in the sources, including victims of government forces (including police forces), rebels, warlords, paramilitary, local militias, self-defense-units, PSCs</p>
idActor0	EDACS-ID of involved actor

<sup>14</sup> Usually integer. Rational numbers are possible due to split events. Regard chapter 2.1.

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idActor1 ... idActorN	
ActActiv0 ActActiv1 ... ActActivN	Dummy variable indicating event initiators.
ActAly0 ActAly1 ... ActAlyN	Existence of alliances or coalitions, which take part in the event. 0 = not allied 1 = first ally 2 = second ally
ActUncon0 ActUncon1 ... ActUnconN	In case the source states uncertainty about one of the involved actors (e.g. "attack attributed to...").
ActName0 ActName1 ... ActNameN	In this variable the name of the armed group is given. Actors can be <ul style="list-style-type: none"> <li>- rebel groups (e.g. UNITA, LRA, or AFDL)</li> <li>- government forces (GOV)</li> <li>- external states (e.g. France, USA)</li> <li>- international (e.g. UN, EU, or NATO)</li> <li>- regional organizations (e.g. AU).</li> </ul> Predefined categories for generic actors are (among others) REBEL(S) (unidentified rebels), WARLORD (armed supporters of unknown warlords), BANDIT(S) (bandits), MILITIA (unidentified militia) and UNSPECIFIED_ACTOR (unspecified actor)
ActDesc0 ActDesc1 ... ActDescN	Qualitative description of actor
ActLead0 ActLead1 ... ActLeadN	Name of leader of armed group
ActOrign1 ActOrign2 ... ActOrignN	Name of the country from which the actor originates ("International" for transnational organizations such as UN or AU)
idSrce0 idSrce1 ...	EDACS-ID of source

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idSrcN	
SrceDate0 SrceDate1 ... SrceDateN	Source Date
SrceName0 SrceName1 ... SrceNameN	LexisNexis news source of event. Usually New York Times, The Guardian, Washington Post or BBC Monitoring. Other additional sources are specified with date of access and URL.
SrceBias0 SrceBias1 ... SrceBiasN	Indicates if source is biased. 0 = no bias 1 = bias due to report of event participating actor 2 = bias due to report of conflict participating actor

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