

# **The Actor-Process-Event-Scheme as a Tool for Policy Network Comparison**

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## Abstract

One of the major shortcomings for the use of Social Network Analysis (SNA) in comparative public policy research is the lack of practical, but all the same valid and reliable procedures to generate comparable network data. We suggest to transform information from qualitative decision-making case studies into quantifiable data for the analysis of policy networks. Focusing on the actors' participation in decision-making processes, we visualize in a first step the description of a policy process in an 'Actor-Process-Event Scheme' (APES). In a second step, we transform the network data formalized in the APES as a 'two-mode'-matrix into 'one-mode'-network data. In addition to the single case study analysis, the policy networks generated by this means, can be compared over different cases by the application of formalized methods. In this paper, for the first time we present results of such a comparison.

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## Introduction<sup>1</sup>

Over the last two decades the concept of policy networks has gained both importance and acceptance in political science. After a first phase characterized by a rather uncritical use of the term and concept it has become clear that for comparative studies a metaphorical understanding of policy networks does not add much to empirical and cumulative research (Dowding 1995; Van Waarden 1992: 49). On the one hand the scholarly discussions made it clear that the concept of policy networks – understood as an approach to describe relations between political actors within a policy domain – is not a theory in itself. For hypotheses testing research one has to combine the network concept with middle-range theories of the state and public policy-making. On the other hand empirical studies of a more rigid form fell into the trap of applying Social Network Analysis (SNA)<sup>2</sup> to the concept of policy networks without clarifying the link between theory and SNA as a (quantitative) method. Much time and effort was put into data gathering and the refined use of SNA (John/Cole 1995: 306) to the effect that comparative research was only possible for very few cases or (the few) large and well funded research teams.

However, we think the concept of policy network is important for comparative political science research and that policy networks should be treated as a variable in models of the political process. Moreover, SNA can and should be applied more often in order to produce useful data for comparative studies approaches (e.g. within Qualitative Comparative Analysis, see Ragin 1998). In case one agrees on these premises, the question arises how to generate network data in an efficient but valid and reliable manner. In our view it is one of the major shortcomings for the use of SNA in comparative research that there is a lack of *practical* procedures to generate comparable cases, especially for people not familiar with SNA.

As many policy analysts we used to do case studies based on the analysis of archival records (Reh 1995) and guided interviews (Kvale 1996). In our case, the empirical material consists basically of narrative thick descriptions focusing political actors' participation and influence in decision making processes on Swiss foreign policy.<sup>3</sup> But – as generally with a comparative

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<sup>1</sup> The basic ideas for this tool have been published in a research note in the Swiss Political Science Review (Serdült/Hirschi 2004) and were presented at the 2<sup>nd</sup> ECPR General Conference, Marburg, Germany, 18-21 September 2003, and the International Conference on “Democratic Network Governance”, Copenhagen, Denmark, 21-22 October 2004. We appreciate the comments and suggestions provided on these occasions.

<sup>2</sup> For an introduction see: Serdült 2002; Scott 2000; Trezzini 1998; on an advanced level: Wasserman/Faust 1995.

<sup>3</sup> The research project leading to this paper was part of the National Research Program on the “Foundations and Possibilities of Swiss Foreign Policy” (NRP 42). Our research project layed stress on

case study design – it was hard for us too to overcome the descriptive character of our case study based research and to come up with significant generalizations.

In this paper we try to overcome these difficulties. We do this in that we propose – in a first step – rather simple transformations of descriptive case studies into an Actor-Process-Event Scheme (APES). Thus, APES is our tool to systematize descriptive empirical information about decision making processes in order to apply policy network concepts to empirical data based on case study research. In a second step, we utilize this systematized information to compile the raw data for SNA. Finally, we apply our approach to seven decision making processes (cases) and test its practicability and adequacy. Our findings show that our tool is a rather valid and reliable way for systematic network comparison, although there are still possibilities for its further development.

### **Step One: The Actor-Process-Event Scheme (APES)<sup>4</sup>**

We assume that it is possible to derive a structure – understood as relations between nodes – from process information. Every process understood as a sequence of linked events contains the information necessary to derive an underlying structure. In SNA there are many applications based on this idea, namely *affiliation networks* or *actor-event networks* (Wasserman/Faust 1995: 291-96; Jansen 2003: 102). For our purposes, we propose that event participation of political actors in an event of the decision-making process on the one hand and process links connecting these events on the other hand are sufficient indicators to operationalize the structure of a the decision-making process in the sense of a policy network. In fact, as many social network researchers before, we regard event participation to be the basic information in order to study affiliation networks (Wasserman/Faust 1999: 295-296). In more practical terms, it becomes necessary to systematically extract information on a) political actors, b) process links, and c) events from a case study about a decision-making process. Our analytic tool, APES, stores these three pieces of process information and systematizes the data for the structural analysis in the second part of this paper.

#### *What the APES shows*

The APES is a graphical interface linking the participating actors with the chronological sequences of the decision-making process. It runs within a

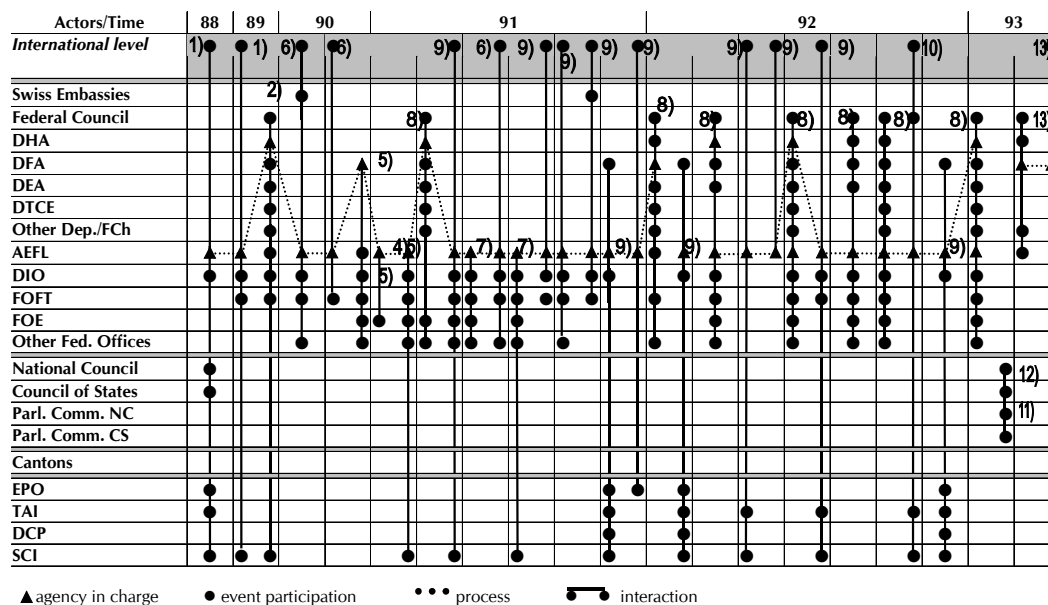
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consideration of domestic policy factors that affect the decision-making process in Swiss foreign policy (Klöti et al. 2004, 2000; Hirschi et al. 1999).

<sup>4</sup> The Actor-Process-Event Scheme in its current version was developed within the NRP42 research project and is also based on work of team members Ulrich Klöti (1984), Thomas Widmer, as well as previous research within other projects, especially see Buser (1984).

two-dimensional space spanned by an axis with the involved governmental and non-governmental actors on the vertical reference line and a timeline in the horizontal that separates the policy process into different stages and events. For illustration, Figure 1 shows the APES of the decision making of the Swiss ratification of the UN Framework Convention on Climate Change in 1992 (Rio Convention).

**Figure 1:** Actor-Process-Event Scheme of the Swiss ratification of the UN Framework Convention on Climate Change 1992



Events: (combined):

- 1) Request for political problem solving
- 2) Inner-administrative preliminary investigations on political problem
- 4) Societal consultations on drafted proposal of political problem
- 5) Inner-administrative consultations on draft of proposal of political program
- 6) International negotiations
- 7) Inner-administrative consultations on elaborated proposal of political program
- 8) Decision of the government (federal council)
- 9) Initialization and negotiations of an international treaty
- 10) Signing of international treaty
- 11) Session of parliamentary committees
- 12) Parliamentary session
- 13) Ratification of international treaty

The **United Nations Framework Convention on Climate Change (UNFCCC)** was signed at the Earth Summit in Rio de Janeiro in June 1992 and came into force on 21 March 1994, after 50 states (among them Switzerland) have ratified the international agreement. In Switzerland, an intensive inner-administrative negotiation process on the country's position towards international climate policy has preceded the ratification of the UNFCCC. The response to climate change was organized through several committees, operating at various levels. An Interdepartmental Working Group (IWG) on the Evolution

of the Climate System was set up in 1989 (event 2 in the corresponding APES, see Figure 1). The agencies in charge with the dossier (mainly the Agency for the Environment, Forests and Landscape and the Directorate for International Organizations in the Federal Department of Foreign Affairs) have consulted from time to time representatives from the civil society (especially of environmental organizations and the energy industry), but only scientific circles (ProClim) have been incorporated continuously in the decision-making process. However, the Federal Council has been hardly involved in the preparatory work. Only in the run-up to the international conference, the policy process has shifted from the administrative onto the governmental level.

As illustrated in Figure 1, the APES' focus in the *actor dimension* is on corporate actors (Coleman 1974), which are distinguished along political hierarchy levels and organizational distinctive features. According to our data on both domestic and foreign policy decision-making processes, there are – on the top level – the international actors. On the subordinate levels, there are the domestic actors, subdivided in national governmental agencies, parliament and parliamentary committees<sup>5</sup>, governmental actors from hierarchically subsidiary jurisdictions, and domestic non-governmental bodies.

In the *process dimension*, the scheme is based in principle on the concept of the “policy cycle” (see Howlett and Ramesh 1995: 9-15), in that the scheme deals either with the outflow of a complete policy cycle or with one or more specific stages of the policy cycle of a political program or problem. To simplify matters, our analysis in this paper is phase focused, in that it concentrates on policy formulation and decision-making (i.e., decision-making in the broader sense, in delimitation to policy implementation). In spite of entitled criticism on this “stage heuristic” and the limits of its application (Sabatier 1999: 6-7), the concept serves here a useful purpose by dividing the very complex policy process into discrete stages (see also Parsons 1995: 79-81).

The APES indicates actors participating in a specific event of the policy process with a black bullet (●). According to our definition, an actor's involvement in a specific event is given if at least one representative of this specific actor is directly taking part in the specific event under consideration. Actors that are participating together in an event are linked (symbolized as: ●—●). Finally, a dashed line (----) symbolizes the course of the policy process. The dashed line links the actors in charge (indicated by a triangle ▲) with the topic of the policy process (the political program/measure or the dossier on a specific policy problem, in our example an international treaty that is under consideration) on the occasion of the specific events of the policy process.

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<sup>5</sup> Thus far, the APES aggregates all parliamentary actors, namely the political parties. In a next version we will eventually list event participation of all political parties separately.

### *How the APES is created*

A “thick description” of the policy process, as we generally find in case studies (Yin 2003), is the source material of an APES. The thick description is a detailed narration of the incidents within and around defined crucial events of the policy process, with particular attention to the involvement and non-involvement of governmental and non-governmental actors. Starting with a list of crucial events of a decision-making procedure (defined by institutional characteristics and the rules of the political system under study) and the relevant political actors (such as governmental bodies, public administration agencies, political parties, interest organizations etc.), this “thick description” can be transformed into an APES in which the political actors interact by a) event participation and are connected with each other by b) procedural (institutional) linkages.

But before we can assign individual actors to specific events of the policy process under investigation, we have to concretize the stages of the policy cycle and adjust them to empirically observable events. The definition and selection of the *crucial events* within the policy process depends on the one hand on parameters of the political system and on the other hand on specific characteristics of the policy process under investigation. Therefore, the definition and containment of the relevant events of the policy process has to be done in accordance with the specific characteristics of the object under investigation. In the appendix we list the events and the according definitions how we used them for our analysis of decision making processes in Swiss domestic and foreign policy.

As much as the selection of the events under investigation is crucial, the actor participation in the selected events can only be judged on previously defined criteria. For our analysis, two sources for tracing empirical evidence have been relevant: 1) empirical evidence for actor-participation in written documentation about the specific events (such as protocols, negotiation reports or file notes), based on a document analysis of governmental and non-governmental sources (Widmer and Binder 1997: 223-4; Reh 1995); 2) information given by the political actors themselves, based on interviews with representatives of participating and non-participating actors (Kvale 1996; Meuser and Nagel 1991).

### *Options for APES applications*

The APES is meant to be a practical methodological tool for visualizing and assessing policy processes, as well as for transferring qualitative information on decision-making processes into quantifiable data for applying SNA. Hence, we attach great importance to the tool’s openness and versatility in order to make it applicable to both domestic and foreign

policy processes and, moreover, to take into account the distinctiveness of different political systems and its political actors.

The presentation of our tool here shows only its most generic use. Just as an illustration we highlight in the following some possible options. Even this short list gives a hint of the flexibility of the tool and displays a promising outlook on future possibilities of the tool's application within public policy analysis:

### *1) Options in the actor dimension*

It is obvious, that each policy process has its own political actors or groups of political actors. The APES takes this fact into account. By dividing the actor-axis into an international and a domestic level, a first rough distinction between groups of political actors is made. In accordance with structural characteristics of the political system under investigation, the researcher is then able to differentiate as many actors as necessary for each level, in order to outline the decision-making process. A first generic APES, as presented below, shows aggregated groups of political actors and their role within the policy process. In order to gain an even more detailed look at the composition of a particular group of actors, however, the APES allows to focus on each and every aggregated group, such as for instance the legislative body or interest organizations. Thus, it is possible to design an APES for a specific group of actors and, resulting from this data, to calculate its underlying policy network. By applying this procedure, the information gained is not only multiplied from a quantitative point of view, but foremost it is of higher quality, since it becomes possible to take a differentiated look at the involved actors on every level.

In addition, the importance of actors within a particular policy process can be visualized and therefore weighted for the data transformation. Thus, a distinction between active and passive actors could be one possible weighting-procedure. Actors could then be defined as actively participating within a policy process, if at least one representative of the actor is directly taking part in the specific event under consideration, whereas an actor's involvement in a specific event could be labeled as passive, if the actor is only informed about the procedure and/or the results of the specific event without being directly involved in that event. Such a distinction makes sense, especially while considering the high amount of actors usually involved in a decision-making process. But again, it is the researcher who decides, whether such a distinction is to be made and in what it should consist of.

### *2) Options in the process dimension*

The analysis of a decision-making process implicates, as a basic component, a procedural dimension. Within the APES, the procedural

dimension is operationalized by the time-axis, which displays the duration of a decision-making process. In a generic APES, as shown below, the classification in years visualizes the policy process as a whole and allows the researcher to easily identify distinctive stages within the process. Since each stage of the decision-making process knows different actors and events and therefore generates important information to the researcher, it is certainly worthwhile to analyze each stage separately. Thus, the APES allows the researcher, depending on her or his interests, to choose a particular stage of the policy process, either defined within a certain period of time or by certain events (e.g. inner-administrative consultations). Like this, it is possible to identify not only the crucial events, which took place during a certain stage of the policy process, but also to take a much deeper look at the actors involved. The researcher will then be able to compare either different stages within a single case study or the same stages within different cases.

### *3) Options in the event dimension*

While investigating a decision-making process, one is confronted with the identification of crucial events, which shape the policy process and its outcome. Since each policy process is different and depends on the parameters of the political system in which it takes place, the comparison of decision-making processes, even within the same political system, have delivered no satisfying empirical evidence to this day. Using the APES-tool, however, it is possible to define events in accordance with case-specific characteristics. The definition of events is not given by the scheme itself but has to be done by the researcher and can therefore be adjusted to the circumstances of any particular policy process. It is the researcher's decision, how narrow or how broad the definition of an event should be. By applying the same definitions on different cases, however, a systematic comparison becomes possible.

In addition to this, each APES user decides whether particular events should be qualified as more important for the whole policy process than others. With this option, particular events, like for instance international negotiations or governmental decisions, can be weighted more strongly than others.

### *The data we work with*

At this point our empirical data derives from three research projects that have been conducted at the Department of Political Science at the University of Zurich, dealing with decision-making processes on Swiss

domestic and foreign policy issues.<sup>6</sup> Our data consists of eight case studies of which seven illustrate Swiss foreign policy decision-making processes and whereas one discusses a policy process on a domestic issue. The data collection of all eight case studies is based on archival records and expert interviews.

## **Step Two: From Actor-Process-Event-Scheme to Policy Network**

After having established the APES as an intermediate step to gather the information we need out of the descriptive case study, we can prepare the next stage of the transformation from procedural to structural data. The APES serves us to create two distinct data matrices: matrix [a] containing data about event participation (two mode actor-event matrix) and matrix [b] containing data about the procedural links between political actors (one mode actor-actor matrix). For data entry and transformations we used UCINET 6.64 for Windows (Borgatti et al. 2002).

### *Event participation*

Matrix [a] with the predefined actors in the rows and the events in the columns is generated by filling the cells with a value of one (1) in case an actor did participate in an event, with a value of zero (0) in case an actor did not participate. We then transform this actor-event matrix into an actor-actor matrix applying the adequate procedure in UCINET 6 for Windows (Data.> Affiliations – row mode). This transformation creates a matrix containing symmetric relations between all pairs of actors participating in the decision-making process. Since reflexive ties do not make sense here, the diagonal of the resulting matrix can be set to zero (Transform.> Diagonal – New diagonal value=0). As an example (see Annex, matrix [a]): a value of 5 in the cell 6-7 of matrix [a] means that both actors 6 (Department of Transport and Energy) and 7 (Agency for the Environment, Forestry and Landscape) jointly participated in five events.

This whole transformation assumes that there was interaction between all actors participating in an event. We are aware that this is a rather problematic assumption given that event participation does not necessarily lead to interaction with all actors. However, we hold that the resulting matrix [a] serves as a good approximation in order to reflect one important aspect of the policy network concept.

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<sup>6</sup> See footnote 1. In addition to the empirical data from the NRP42 project, two diploma thesis on domestic decision-making processes on foreign policy issues are at our disposal (Vögeli 2003; Hirschi 2000). All these case studies are based on a comparative case study design (Yin 2003; King et al. 1994: 43-46) and have been conducted according to the same procedure.

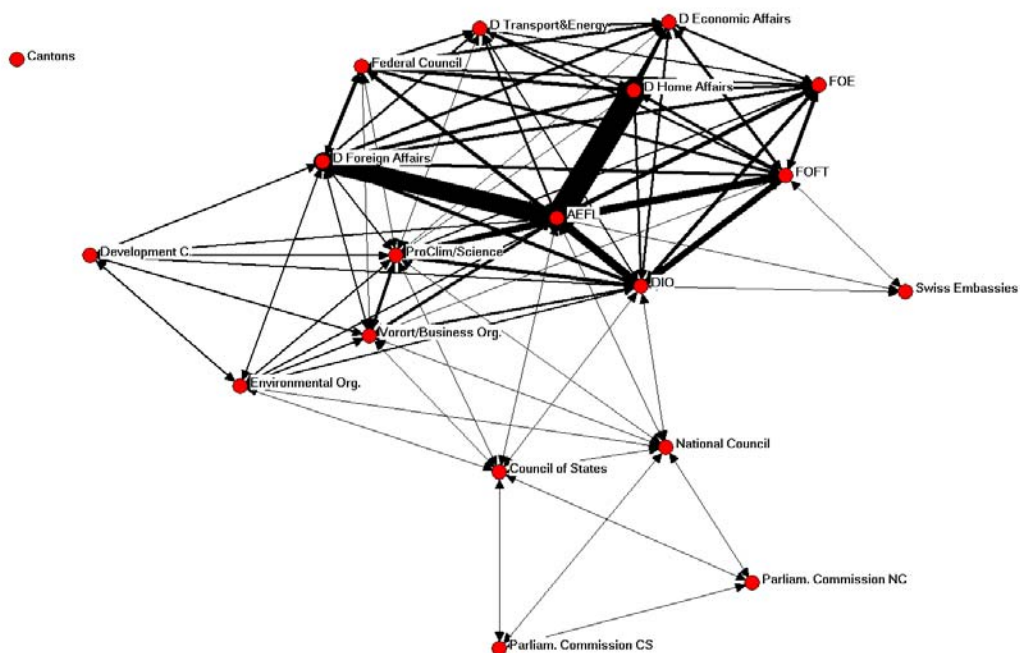
### *Procedural links*

Matrix [b] with the predefined actors in the rows and the columns is generated by filling the cells with the sum of all process links. In case an actor has a process link with another actor we attribute a value of one (1), in case there is no process link a value of zero (0). The resulting matrix can be asymmetric and has the same size as the transformed matrix [a]. As an example (see Annex, matrix [b]): a value of 2 in the cell 7-4 of matrix [b] means that altogether there are two process links leading from actor 7 (Agency for the Environment, Forestry and Landscape) to 4 (Department of Foreign Affairs).

Because we regard both dimensions represented in matrices [a] and [b] as important in order to reflect the structure of the decision-making process in the form of a policy network, we suggest not to just sum up the two matrices but to multiply them. Computationally, the multiplication of the matrices gives what we regard an adequate weight to the process link matrix [b], which otherwise would only play a minor role not compatible with our understanding of the importance of process links in a decision-making process. As a result, actors with process links get much more weight in the resulting matrix. Before multiplication, we create additional multiplier matrices in which all zeros (0) in matrix [a] and [b] have – for mathematical reasons – to be set to a value of one (1) (Transform.> Recode..). The multiplication itself can conveniently be done in UCINET (Tools.>Matrix Algebra.>Multiply). For computational reasons we then multiply matrix a) with the transformed version of matrix [b] (all 0 set to 1) and vice versa we multiply matrix [b] with the transformed values of matrix [a]. With the help of the transformed multiplier matrices we make sure not to lose entries in the original matrix [a] without counterpart in matrix [b]. In order to join the two resulting matrices we simply take the average (Tools.>Matrix Algebra.>Average..). The multiplication of matrix [a] and [b] is supposed to represent the policy network derived from procedural data extracted from the original descriptive case studies with the help of an APES. The resulting matrix is not necessarily symmetric and the relations are valued.

As an illustration of the result of this second step, the policy network regarding the Swiss ratification of the UN Framework on Climate Change in Figure 2 visualizes the strong interaction between the agency in charge (Agency for the Environment, Forests and Landscape) and the two mainly involved Federal Departments (of Foreign and Home Affairs) in the core of the network.<sup>7</sup> The Federal Council is rather in the periphery of the policy network, as well as the parliament and organizations of the civil society are. Thus, the policy network illustrates the inner-administrative character of the analyzed decision-making process in an adequate fashion. From our detailed knowledge about this case study we can claim face validity for the obtained network. Empirical validity can be claimed by comparing our results with the work of Boyer (1996). No major difference between the two independently established networks can be discerned. Once the final data matrix is established we can compute standard SNA measures such as the density of the network or degree centralities for all actors.

**Figure 2:** Policy network of the Swiss ratification of the UN Framework Convention on Climate Change 1992 (valued graphs)



<sup>7</sup> For the sake of convenience and as a graphical illustration only, we display a slightly rearranged MDS solution of the geodesic distances as provided in network drawing program NetDraw (Borgatti et al. 2002).

## Comparing Policy Networks

As a very first and brief comparative exercise we present the eight cases stemming from our own case study work over the last few years (Hirschi 2000, Klöti et al. 2005, Vögeli 2003). The eight cases are:

1. ALV; Unemployment Insurance Agreement between Switzerland and Germany 1982.
2. ALVZA; Additional Agreement to the Unemployment Insurance Agreement between Switzerland and Germany 1994.
3. AVIG; Revision of the Swiss Unemployment Insurance Law 1995.
4. DBA; Double Taxation Agreement between Switzerland and
5. ISA; Investment Protection Agreement between Switzerland and Ghana 1991.
6. KLIMA; Swiss ratification of the UN Framework Convention on Climate Change 1992.
7. LVA; Air Traffic Agreement between Switzerland and
8. TRANSIT, Agreement between Switzerland and the European Community about the transport of goods on roads and railways 1992.

Case no 3 is the only decision-making process on a domestic issue in this sample whereas all the other cases are decision-making processes on either bilateral or multilateral international treaties.

For the sake of simplicity we have calculated the relative degree centralities for the main actor categories in the network structures we derived after the transformations suggested above. Before the calculation of the degree centralities we symmetrized the data set (Method: Average). The range of values for degree centrality was divided into five ordinal categories starting from very low to very high with an intermediate category (see Table 1). For the actor category 'Administration' we refrained from simply taking the average of degree centralities because it would result in a biased view of the importance of the national public administration during the decision-making process. In case of the UN Climate Agreement the Agency for the Environment, Forests and Landscape was e.g. the most central organization. If we average its high value for degree centrality down with e.g. the low value for the Swiss Embassy in New York we would end up with the public administration being only of intermediate importance. Also, as becomes visible at first sight in Table 1 we did not reproduce the actual values for degree centrality. By transforming our values for degree centrality back into ordinal scale we take into account the needs of the comparative public policy researcher. The results in Table 1 thus become more accessible for traditional and more recent comparative methods such as QCA and truth tables.

**Table 1:** Categorized degree centrality as a measure of activity within the policy network and during the decision-making process for important groups of actors (+ + high, + high, +/- medium, - low, - - very low)

	ALV	ALVZA	AVIG	DBA	ISA	KLIMA	LVA	TRANSIT
Federal Council	+	++	++	--	--	-	-	--
Administration	++	++	++	++	++	++	++	++
Parliament	-	-	+	--	+/-	--	--	--
Cantons	-	--	+	--				
Employer's /Trade Assoc.			+	-	-	--	-	--
Employee's Assoc.			+					
Science			-			-		
Environm. Organizations.						--		--

The results displayed in Table 1 make it clear that only for the domestic decision-making case (AVIG) can we observe a stronger inclusion of Parliament, the Cantons, and societal groups. The seven foreign policy decision-making cases all reflect a strong involvement of the administration. Whenever the issue at stake is related to unemployment (ALV, ALVZA, AVIG) the Federal Council seems to be more active as well. For the three cases 'below the threshold of perception', namely DBA, ISA and LVA the administration is clearly most active. Cantons and Parliament are not heavily involved in the decision-making process at all. From societal groups only employers, business and trade interests are to a minor degree active in the process. For the two most prominent foreign policy decision-making cases (KLIMA, TRANSIT) the general picture for foreign policy decision-making still holds. The administration being most involved and the Federal Council only occasionally stepping in. However, for the prominent cases we can observe an overall stronger involvement of societal organization.

### **Toward an Assessment of the Policy-Making Process by Comparing Policy Networks**

One possible practical application of the methods and procedures presented above could lead towards a contribution of SNA to the quality of democracy debate. As a supplement to the approaches followed by most scholars engaged in the quality of democracy debate (see for example: Beetham 1994; Lauth 2000) we suggest that looking at the policy process in more detail can help to capture the informal aspects of the political in a

democracy. We know that in governance networks democratic countries have a lot of discretion handling the formal and informal routines involved with decision-making processes. The basic idea is to make use of the tools and procedures presented in this paper and to derive indicators helping to assess the quality democracy in the sense of an assessment of the policy-making process.

Although starting the discussion from a different angle, Schmitter's (2004: 20) piece on accountability comes to a similar conclusion. In his paper he is shifting the attention to the decision-making process as the unit of interest and investigation. Cross-tabulating time and political actors during a decision-making process he develops an APES-like approach to the assessment of the quality of democracies. Conceptually close to our understanding Orenstein (2002) follows a similar path trying to measure the relevance, inclusiveness and implementation of democratic policy processes.

We hold that with the help of the APES and related procedures we can benchmark decision-making processes making use of indicators including information on the duration of certain phases or the whole process and the respective involvement of political actors. Basically, it is possible to develop indicators for the efficiency and inclusiveness of decision-making processes. These indicators can then be compared within or across policy domains, political systems on any governmental level, legislative periods, governmental agencies in the lead of a decision-making process etc. In practice, within a defined range of values decision-making processes are considered to be ok. However, even cases with very extreme values must not necessarily be undemocratic. It would simply be necessary that extreme deviations from the normal decision-making process can be explained.

We presented but a first step in the direction towards a reliable, valid and practical tool to produce policy network data out of political process data. The proposed procedure provides an easy to follow, not too technical solution to develop structural data out of process data from case studies about political decision-making. In principle, this procedure can be applied to decision-making processes in any political system.

Along the procedure we made several important procedural and conceptual decisions probably affecting the final results. The question whether the proposed procedure leads to valid and reliable results is not yet fully answered and needs to be assessed in the future.

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## Appendix 1: Event list applied to decision-making processes in Swiss domestic and foreign policy

no	event	policy dimension
1	<b>request for political problem solving</b> defined as the formulation of an explicit political problem by private or administrative actors on national or international level	domestic/ foreign
2	<b>inner-administrative preliminary investigations on political problem</b> defined as preparatory work within the administration in the forefront of a first draft of a political program on a political problem	domestic/ foreign
3	<b>development of preliminary draft of proposal of political program</b> defined as assessment of results of inner-administrative preliminary investigations leading to a first draft of a political program	domestic/ foreign
4	<b>societal consultations on drafted proposal of political program</b> defined as the involvement of private actors in the process of deliberating over an appropriate political program	domestic/ foreign
5	<b>inner-administrative consultations on draft of proposal of political program</b> defined as the involvement of inner-administrative actors (besides the agencies in charge) in the process of deliberating over an appropriate political program	domestic/ foreign
6	<b>international negotiations</b> defined as a process in which authorized agents bargain with international partners over a draft of an international treaty	foreign
7	<b>inner-administrative consultations on elaborated proposal of political program</b> defined as submission of an elaborated proposal of a political program by the department and ministry in charge and the deciding governmental body (federal council) and its inner-administrative consultation	domestic/ foreign
8	<b>decision of the government (federal council)</b> defined as authoritative decision of the responsible governmental body (federal council) based on the results of the inner-administrative consultations	domestic/ foreign
9	<b>initialization and negotiations of an international treaty</b> defined as an event on the international level with the aim to terminate the international negotiations	foreign
10	<b>signing of international treaty</b> defined as an event on the international level in which the terms of the international treaty are fixed	foreign
11	<b>session of parliamentary committees</b> defined as phase in which the responsible parliamentary committee(s) debate and decide on the proposed political program/ international treaty	domestic/ foreign
12	<b>parliamentary session (national council/ council of states)</b> defined as legislative debate and decision-making process on the proposed political program/ international treaty in the parliamentary plenum	domestic/ foreign
13	<b>ratification of political program/ international treaty</b> defined as an event in which definite volition according to national/ international law is proclaimed	domestic/ foreign

