

Performance Information in Legislative Revisions in Switzerland

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Abstract

The movement of evidence-based policy-making has gained considerable attention in recent years. We can observe an increased production of research-based information about the effectiveness (performance) of public policies. Existing research shows that such information rarely prevails in democratic politics, but has remained inconclusive about the conditions affecting its relevance in policy-making. This paper aims first to clarify the conditions shaping the role of performance information in policy-making, and second presents empirical findings from twelve cases studies dealing with legislative revisions of policy measures in the fields of traffic safety, health and asylum policy in Switzerland. The analysis provides an assessment of how the creation and diffusion of performance information as well as the political context affect the role of such information in revisions of federal legislation in Switzerland.

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Introduction

Compared with other countries such as the U.K., Sweden or the U.S., Switzerland is not considered to be a front-runner in introducing and promoting evidence-based policy-making. Nevertheless, we can observe an increasing production of evaluations as concomitant to various steering reforms in Switzerland (Widmer and Neuenschwander 2004; Balthasar 2007; Beywl and Widmer 2009). This paper investigates the role of systematic evidence about the effectiveness and efficiency of policy measures, so called ‘performance information’, in legislative revisions at the Swiss federal level. The question is, whether we can observe feedback loops of ‘problem solution – performance – revised problem solution’ and if yes, under which conditions are they most likely to occur?

Research findings from the 1980s show that scientific argumentation, evaluation findings, and recommendations play a little role in decision making in Switzerland (Germann 1991; Klöti and Schneider 1989; Freiburghaus and Zimmermann 1985). More recent research generally confirms this observation and emphasizes that policy-making in Switzerland is more oriented towards gathering support than towards gathering evidence. To avoid failures in subsequent plebiscites, the administration, government and parliament are strongly concerned to ensure broad support prior to suggesting any new policy. Only under specific circumstances empirical evidence plays a crucial role in policy formulation in Switzerland (Widmer and Neuenschwander 2004, 391). However, research has remained inconclusive about the conditions affecting the relevance of performance information in decision making. This study aims to contribute to the clarification of these conditions by developing and testing an integrative framework drawing on utilization research and on the policy literature focussing on the role of ideas. The integrative framework is organized by the idea of a flow of information and differentiates between three types of conditions, namely the ‘characteristics of existing performance information’, the ‘diffusion of such information by mass media’ and the ‘political context’ that shape the role of performance information in legislative revisions.

Existing empirical studies mainly focus on evidence from particular sources and restrict themselves on particular instances of information utilization (Webber 1991). This study proposes to follow an alternative approach: first, the analysis concentrates on the influence of performance information within policy revision processes. Second, the analysis incorporates all sources of performance information that are available to policy makers. The analysis includes not only information about the performance of policy measures implemented in

Switzerland, in the following addressed as ‘Swiss specific information, but also analogue information from other countries. So far, very few studies have followed such an approach (for one of the rare examples in Switzerland, see Klöti and Schneider 1989). The empirical analysis is based on a comparative case study design and concentrates on twelve adaptations of policy measures embedded in six revisions of federal legislation in three different policy fields. This research design allows for intra as well as cross policy comparisons.

The paper is structured as follows: In the next section ‘performance information’ is defined, thereafter the theoretical framework and the research design is outlined. In the next part of the paper, the empirical findings are presented. First, a detailed analysis of the influence of performance information in the revisions investigated is presented. Second, the theoretical framework is applied to explain the observed differences. The conclusion summarizes the main findings and discusses the strengths of the proposed theoretical framework.

Defining Performance Information as Systematic Evidence on ‘what works’

This analysis focuses on *performance information* defined as systematic evidence about the consequences of a public intervention measured in a systematic and transparent way. Such information can be labelled as research-based or scientific evidence in contrast to anecdotic evidence. There is no consensus about what counts a sound evidence for decision making within the evidence-based policy movement (Donaldson et al. 2009). The core issue of this debate deals with the questions what types of studies are capable of determining causality and which methods are capable of demonstrating scientific rigor. The definition of performance information used in this analysis applies no rigorous standard of scientific quality. From the methodological point of view, the definition only requires that the evidence is collected and analysed in a systematic and transparent way. Additionally, the definition includes two restrictions: The evidence must have been accessible for the involved actors and produced in the period after the enactment of the regulation under revision and prior to the adoption of the revised regulation. In contrast, the definition does not apply any restriction concerning the source of the evidence: It can be commissioned and produced by state actors as well as other public or private actors and can be Swiss specific or related to other countries.¹

¹ This definition allows to trace the influence of subgroups of performance information, for instance with respect to producers (public administration, academic expert, interest organization, etc.) or the origins (Swiss specific or related to other jurisdiction). However, in this paper such a detailed analysis is not provided.

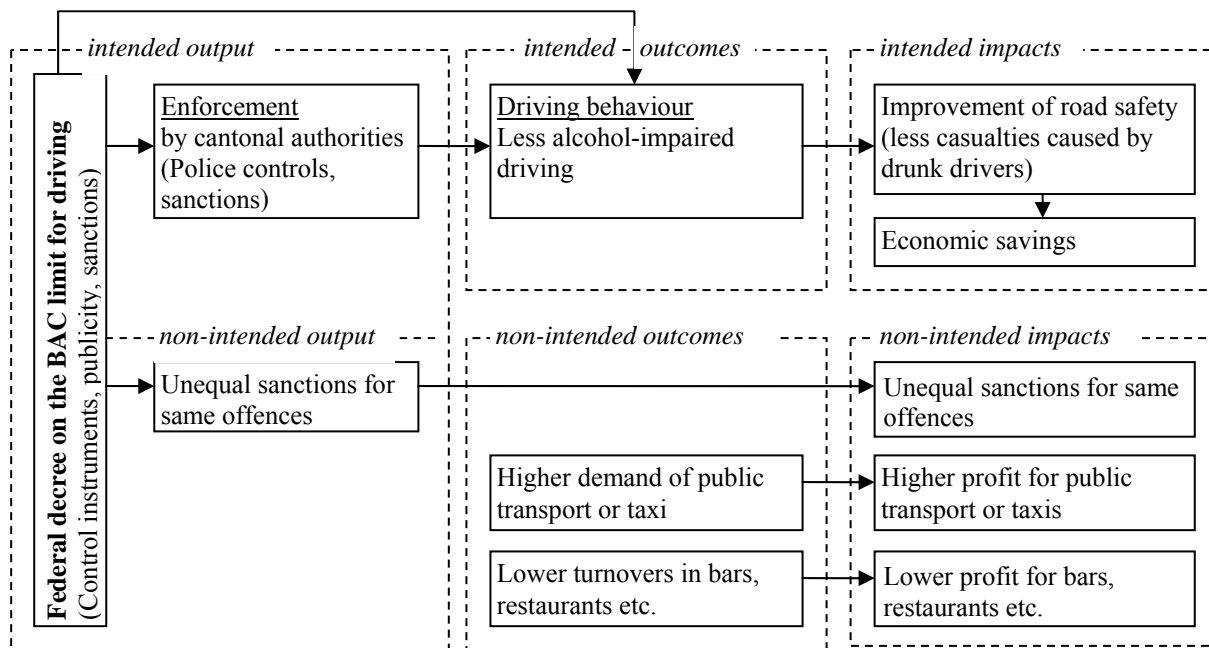
Performance ('what works') refers to the causal framework (set of hypotheses) inherent, either explicitly or implicitly, in every policy: If the government undertakes a set of actions, a set of effects are likely to occur. In policy analysis and evaluation, the concept of the *chain of effects* (e.g. Chen 1990) is broadly used to systematize and map the causal framework of a policy measure. It suggests mapping policy performance on three interdependent levels: output, outcome and impact. The *output* represents the products and services of a policy measure and creates a direct relationship between the public authority in charge and the addressees of the policy measure. The addressees involve all actors whose behaviours are relevant to the problem in question. *Outcome* refers to the effects the policy measure has on the direct addressees. The policy addressees can react as expected, not react at all or even react in a non-intended manner. Finally, *impact* encompasses all intended or non-intended effects of a policy measure in the society and shows if the policy leads to an improvement of the problem or not. Thus, in this paper performance information refers to investigations dealing with one or several relationships between these three levels of effects.

In Figure 1, the concept of the chain of effects is illustrated by an example of the cases investigated, namely the traffic safety measure 'legal blood alcohol concentration (BAC) limit'.² The federal law on the BAC limit as well as implementation activities such as a national information campaign constitute the policy output at the federal level. In Switzerland, the cantons are responsible to control compliance and to sanction offences against traffic safety legislations (output at the cantonal level).³ Performance information about this policy measure investigates, for instance, if a reduction of the legal limit leads to less alcohol-impaired driving, and thereby reduces alcohol-related traffic fatalities. Further, performance information can also deal with non-intended effects: The legislative leeway with respect to the duration of administrative licences suspension for offences could lead to the non-intended output respectively impact of unequal sanctions for the same offences in the different cantons. It can also be of interest to create performance information regarding the non-intended outcome of lower turnovers in bars and restaurants feared by the concerned industry.

² The chain of effects for the policy measure is based on a document analysis and contains central expectations put forward by the involved actors as well as the effects investigated by existing performance information.

³ Cantons have not only implementation competencies but also programming competencies in the application of the federal laws. In other words, the chain of effects of a federal policy implemented in a federalist context has a multilevel structure with respect to public services and products provided at the national and cantonal levels (see also Sager/Rüefli 2005: 110).

Figure 1: Chain of effects of the policy measure 'blood alcohol concentration (BAC) limit'



Tracing the Influence of Performance Information: A Pragmatic Approach

This analysis aims to trace the extent to which legislative policy-making dealing with a revision of a policy measure is influenced by performance information. To trace the influence of performance information, we first identified all existing performance information following the proposed definition. The *influence* of performance information is a cognitive phenomenon that can not be observed and measured directly. In the research on evaluation utilization, we find various approaches how to conceptualize and measure 'utilization'⁴ or 'influence'⁵ of research-based information on policy-making. In policy analysis, there is also no common approach how to deal with the influence of ideas or how to conceptualize learning (Howlett and Ramesh 2003, Radaelli 1995).

This study proposes a pragmatic approach to cope with the cognitive phenomenon. It assumes that any influence of systematic evidence including performance information originates from the information processing behaviour of the involved actors (see Mark and Henry 2004). With the notion of *involved actors* a comprehensive approach is followed including not only

⁴ For syntheses of 'utilization research' see for instance Shulha and Cousins 1997; Weiss 1998; Vedung 1997, for empirical studies Amara et al. 2004; Weiss et al. 2005.

⁵ Kirkhart (2000) and Mark and Henry (2004) prefer the term 'influence' to cope with the effects of evaluations because 'utilization' and 'use' suggest purposeful action, whereas effects of evaluations are more diffuse.

members of the government and the parliament but also public servants, interest groups, and non-governmental organisations. Actors' positions stated in documents and interviews were analyzed if they refer to performance information. Furthermore, the analysis takes into account that performance information is only one type of relevant information and knowledge available to the involved actors and involved actors might pay attention to many things other than performance information; e.g. systematic evidence on the size or causes of the problem, the costs of change, claims of powerful interest groups (Webber 1991; Davies et al. 2005).

In utilization research but especially in policy theory, the crucial question is whether performance information is used to learn and improve a policy solution, or (only) used to pursue self-interests and thereby, opportunistically used to legitimize a decision taken on other grounds (see for instance Albaek 1995, Weiss 1999). The concept of evidence-based policy emphasizes the first intent and postulates the maxim to base political decisions on knowledge about what type of efforts work and with which means. In its strict sense, this concept follows the logic of rational decision making (Parsons 2002; Sanderson 2002). Policy-makers are supposed to specify the goals, draw attention to the alternative ways in which the goals can be achieved, evaluate the consequences of the alternatives, and select the alternative that maximizes the benefit. However, since the 1960s various studies have shown that *instrumental utilization* rarely occurs in reality and covers only a very specific aspect of the phenomenon (for a syntheses see Shulha and Cousins 1997).

To deal with this question, this study argues that if performance information was present in an early stage of the revision process, it can be assumed that performance information was considered with the aim to improve a policy measure, and not only to legitimize an adaptation. Furthermore, the analysis takes into account how the involved actors describe the influence of performance information in the revision processes.

Conditions Shaping the Role of Performance Information: An Integrative Framework

Neither the literature about evaluation utilization, nor the literature concerned with ideas and policy learning provides us with a comprehensive and widely accepted theoretical framework to explain the role of research-based information in policy-making (Webber 1991; Bennett and Howlett 1992; Mark and Henry 2004, James and Jorgensen 2009). This study proposes an *integrative framework* and argues that the role of performance information in policy-making is shaped by the processes of *creation* and *diffusion* of such information as well as the

political context. This framework is inspired by the idea of a flow of information taking place in a political context. In the following sections, the conditions are introduced in more details.

Characteristics of Existing Performance Information

The literature on evaluation utilization emphasizes that the characteristics of a study and its production context affects the attention, rejection or acceptance by the users (Weiss and Bucuvalas 1980). First of all, performance information should be *accessible* and *well-time* to influence policy-making. Further, we can argue that performance information becomes more relevant to find the ‘best’ policy and more powerful to gain support if findings are *consistent* and leave little room for *uncertainty* (Esterling 2004; Gormley 2007).

Whether or not performance information is considered, crucially depends on how it is perceived by potential users. Empirical studies, mainly focussing on civil servants, show that users consider the quality of an evaluation and its relevance to their needs. Carol Weiss and Michael J. Bucuvalas (1980) showed that the decision-makers – US officials in federal, state and local mental health agencies – use two frames of references. On the one hand, the *truth-test* refers to research quality and conformity to user expectation. On the other hand, the *utility-test* refers to the action orientation of the study and its challenge to status quo. Thereby, the quality of an evaluation has the highest salience and Weiss and Bucuvalas assume: “Research quality, thus not only assures decision-makers that they are basing a case on good evidence but also serves the political function of protecting the case from methodologically based criticism.” (ibid. 307). These considerations can be summarized by the following hypothesis:

Hypothesis 1

If performance information is timely accessible, consistent and certain, and is perceived as credible, performance information will be more influential in the revision process.

Diffusion of Systematic Evidence by Mass Media

In the literature of evaluation utilization it is often postulated that media attention enhance the influence of evaluations in policy-making (Weiss 1999; Mark and Henry 2004; Weiss et al. 2005). It is argued that *media coverage* on evaluations can affect the behaviour of involved actors by supplying them with new evidence. We propose to differentiate this argument and postulate that for civil servant of the federal administration, specialized agency or interest groups mass media might not be an important information channel because they have privileged access to performance information by other more direct channels. In contrast,

parliamentarians seem to be more dependent on mass media. Further, it is also convincing to postulate that media reports, the publicity especially of problematic performance, can increase the pressure on civil servants and elected politicians to consider certain performance information (Weiss et al. 2005, 24). They have to handle the risk of being blamed in the future to have neglected the performance information diffused by the mass media. Thus, media can enforce the use of performance information not only by its *role as an information channel* but also by its *role as a trigger*. Further support for the relevance of these hypotheses can be derived from the literature on agenda setting and the concept of media framing (Gamson et al. 1992).

Hypothesis 2

If performance information is diffused by mass media, performance information will be more influential in the revision process.

Political Context

Various contextual factors are addressed in policy research to influence the nature of policy-making and therewith also the role of cognitive aspects (see for instance Sabatier and Jenkins-Smith 1993; Radaelli 1995; Weiss 1999). This study proposes to attribute the factors to the following categories: the institutional setting, and the characteristics of the policy field and policy measures.

The *institutional setting* refers to the structure of the decision arena of the policy-making process. Creating, selecting and interpreting performance information involves financial, personal and organizational resource. Thus, the role of performance information depends on the existing *capacities* to process research-based knowledge. The capacities of the administration unit in charge are especially crucial because of its eminent role in the legislative process. The administration is the instance that usually prepares legislative acts and formulates the legal texts for the government and the parliament. In Switzerland, the pre-parliamentary phase is considered to be decisive for the policy content: A majority of the decrees passed the parliament without any substantial changes (Sciarini 2002). In policy research ‘*epistemic communities*’ (Haas 1992) or ‘*policy fora*’ (Sabatier and Jenkins-Smith 1993) that bring together analysts and officials on a regular basis are considered to enhance the influence of cognitive aspects in policy-making. Civil servants and experts have a privileged access to performance information and are specialists in their field whereas members of the parliament are generalists and are too short on time to do the research and

analysis to discover firsthand the political meaning of available research. Based on these considerations, the following hypothesis is formulated:

Hypothesis 3a

If an evidence-oriented administration supported by an expert group plays a decisive role in an early stage of the revision process, performance information will be more influential in the revision process.

Utilization research (Amara, Ouimet and Landry 2004) and policy theory (Sabatier and Jenkins-Smith 1993) argue that the role of performance information is shaped by the characteristics of the policy field respectively the policy measure. *Policy fields* differ with respect to their affinity to technology and natural sciences. In fields with a high affinity to technology, such as traffic policy, we expect that policy-making is more shaped by technical considerations, and thereby more oriented both, towards generation and utilization of performance information. In contrast, in socio-political fields with an ideological and emotional connotation, such as migration policy, performance information is expected to be less influential.

In literature several *characteristics of the policy measure* are emphasized to shape the role of performance information (Rose 1993, 118-42; Weiss 1999; Sabatier and Jenkins-Smith 1993). Most prominent are the *level of conflict* about the revision, the *scale of change* and the *inclusiveness* and *intrusiveness* of a policy measure. The underlying, common argument of these three dimensions is that they might lead to an involvement of lot of actors (interests) and to a polarization of the issues. If there are many interests present and a the revision is dominated by a polarization respectively an intense conflict, the influence of performance information is supposed to be rather marginal or restricted to legitimise a decision. In contrast, if a consensual or collaborative context is present, learning from systematic evidence is more likely to occur (Weible and Sabatier 2009). Additionally, intrusiveness and inclusiveness (Linder and Peters 1989: 40) focus on the design of a policy measure. Whereas intrusiveness a policy measure refers to the degree of intrusion into private affairs, inclusiveness describes the range of a policy measure in a horizontal sense, i.e. the scope of addressees. We argue that in a revision of a highly intrusive and inclusive policy measure, personal experiences of the politicians and values about the way of life may play a more important role than performance information.

Hypothesis 3b

The degree of the policy field's affinity to technology, the scale of change, the inclusiveness and intrusiveness of a policy measure, as well as the level of conflict about the revision will affect the role of performance information in the revision process.

Research Design and Methods

The empirical analysis is based on a comparative case study approach (Yin 2003). A case is defined by a *revision process of a policy measure*. A policy measure consists of a goal and set of activities (instruments) aiming to influence a specific target population in the desired way. Hence, a policy measure is thought to operate through a set of causal beliefs (hypotheses) and can be illustrated by a single 'chain of effects' as illustrated by Figure 1 on page 5. The empirical analysis concentrates on policy measures because performance information defined as systematic evidence on 'what works with whom, how and why' is most precise if it refers to a single policy measure. It is obvious, that severer administrative sanctions for repeat offenders of traffic rules and the introduction of a two-phase driver-training licensing systems call for different performance information. A decision about a single policy measure is influenced by other decisions taking place in the same revision process. Therefore an embedded case study approach seems to be most appropriate (Yin 2003).

A total of twelve case studies have been conducted to apply and test the integrative framework. As hypothesis 3b postulates that the policy field shapes the role of performance information in policy-making, three different policy fields with different affinities to technology respectively ideology were selected: Traffic safety with a high affinity to technology, asylum policy with a high ideological and emotional connotation and health policy as an intermediate field with no clear anticipation. Health policy was further selected because the concept of 'evidence-based policy' stemmed from the concepts of 'evidence-based medicine' and therefore, it is reasonable to expect efforts to realize evidence-based policy in this field. Within each policy field, the two most recent terminated legislative revisions that have attracted some media attention have been selected. If the policy revision comprised more than one policy measure, up to three policy measures were selected to cover the revision more profoundly. Table 1 gives an overview of the selected policy measures.

Table 1: Selected cases of revisions of policy measures

	Traffic safety policy measures	Revision, Year of final decision
1	Speed limitation in urban areas	Ordinance '30 kph Zones', 2001
2	Cascade system: Stiffer administrative sanctions for repeat offenders	Law on Road Traffic, 2001
3	Introduction of a two-phase driver-training licensing system	
4	Reduction of the blood alcohol concentration (BAC) limit to 0,05 %	
	Health policy measures	
5	2 nd Extension of the 'moratorium' for new medical services providers	Law on Sickness Insurance, 2008
6	Heroin-assisted treatment	Law on Narcotics and Psychotropic substances, 2008
7	Stiffer penalties for supplying drugs to minors especially in the neighbourhoods of schools	
8	Authority to advice at-risk (young) people to specialized agencies	
	Asylum policy measures	
9	Social assistance exclusion of all asylum seekers whose applications were not considered for formal reason (non-entry decision).	Austerity Program, 2003
10	More severe coercive measures (extended detention pending removal)	
11	Social assistance exclusion of all rejected asylum seekers	Law on Asylum, 2005
12	More severe coercive measures (e.g. longer detention duration)	

The data collection and analysis was organized and guided by a case study protocol (Yin 2003). Three methods of data collection were applied: media content analysis, document analysis and expert interviews. *Media content analysis* was used to measure the condition 'diffusion of performance information by mass media'. All articles of the three biggest Swiss newspapers dealing with the twelve policy measures were selected and coded if they refer to performance information.⁶ *Document analysis* included the study of three different types of documents. First, documents containing performance information about the selected policy measures were identified and analysed to answer the questions what kind of systematic was available, when and produced by whom. Second, the revision processes were reconstructed by the analysis of documents containing information about the cases including secondary literature and grey literature. Third, all references to performance information in policy documents containing actor's position, such as actors' responses in official consultations or minutes of parliamentary debates, were coded to see whether involved actors did cite performance information. Finally, 45 interviews with key actors involved in the revision processes were conducted. Interviews covered the following four groups of actors: Civil servants, producers of performance information or researchers, non-governmental organi-

⁶ The media content analysis was conducted by my colleague Mirella Schütz, a scholar of mass communication and media research. She kindly provided us the data for this analysis.

zations and parliamentarians who were members of the committees in charge of the revisions.⁷

The Influence of Performance Information in Legislative Revisions

The influence of performance information in the legislative revisions of the twelve selected policy measures varied considerably: In seven cases performance information had an influence, in two cases performance information was present, but not influential, and in three cases, performance information was not at all present (see Table 2).

Table 2: The role of performance information (PI) in the revisions of the twelve policy measures

Policy measure	Reference in official policy documents*	Pre-parliamentary phase	Parliamentary phase	Overall influence
Speed limitation in urban areas	some	high	--	high
Cascade system	no	low	not present	low
Two-phase driver-training system	few	moderate	not present	moderate
BAC limit	few	moderate	present	moderate
Moratorium for new services providers	no	low**	not present	no influence
Heroin-assisted treatment	few	high	present	high
Authority to advice at-risk people	no	not present	not present	not present
Penalties 'supplying drugs to minors'	no	not present	not present	not present
Social assistance exclusion	no	low	present	low
Coercive measures I	no	not present	not present	not present
Extended social assistance exclusions	no	low	present	low
Coercive measures II	no	low	present	no influence

*Official policy documents: Drafts of the legal text, messages of the Federal Council sent out for consultation and sent to the parliament.
 **In this case there was no pre-parliamentary phase.
 Operationalization of the level of influence: *not present* = no traces of PI neither in interviews nor in official documents; *no influence* = interviewees attributed no influence to PI, and the revision is not consistent with the main findings of the PI; *low influence* = interviewees attributed only low influence to PI, no references to PI in official policy documents; *moderate influence* = interviewees attributed some influence to PI, few references to PI in official policy documents; *high influence* = interviewees attributed high influence to PI, few/some references to PI in official policy documents. The analysis of the parliamentary phase is based mainly on the content analysis of the minutes of the corresponding debates and a few interviews. Therefore, we differentiated only between *present* = references to PI in the minutes/interviews and *not present* = no references to PI/interviews.

As postulated, revision processes of traffic safety policy measures seem to be most evidence-based whereas performance information played no crucial role in asylum policy revisions. For health policy, the findings are very diverse and evidence-based policy-making seems to be rather exceptional as observed only in one case, though in this case performance information

⁷ The composition of interviewees is displayed in Table 7 in the appendix.

played a significant role. In the following sections, the findings summarized in Table 2 are further explained by a presentation of the rationales of the revision processes.

Visible Attempts of Evidence-Based Policy-Making in the Field of Traffic Safety:

At the beginning of the 21st century, traffic safety policy was revised in Switzerland after more than a decade without major changes of the legislation. On the one hand, the Federal Ordinance about Zone Signposting in Residential Areas ('30 kph zones') was revised to facilitate the implementation. On the other hand, the Federal Law on Road Traffic was adapted to improve traffic safety through progressively stiffer administrative sanctions for repeat offenders ('cascade system'), the introduction of a two-phase driver-training licensing system and the reduction of the legal blood alcohol concentration (BAC) limit to 0,05 percent.

The revision of the '30 kph zones' adopted in 2001 by the Federal Council comes very close to an ideal of evidence-based policy-making: Performance information about the efficiency and effectiveness of such zones was very present in the policy documents of the revision and interviewees emphasized the relevance of such information. For instance, the policy document announcing the revision,⁸ mentions several studies and refers to the main findings of the existing performance information. The members of the working group appointed by the Federal Roads Office to support the revision and representing central actors of the policy field had also knowledge of the performance information not only from Switzerland but also from other countries. Interview statements indicate that performance information showing how such zones can be efficiently and effectively implemented was used to improve the ordinance.

In the revision of the *Federal Law on Road Traffic*, the influence of performance information was less significant and varies between the three adapted measures (see Table 2). Policy documents contain only few explicit, very incomplete references to performance information. In general, document analysis and interview statements indicate that not performance information but rather systematic evidence about the problems was considered as the most important findings in this revision process. In the case of the *cascade system*, interviewees had knowledge of existing performance information, but pointed out that this knowledge was not very influential for the concrete designing of the cascade system.⁹ The cascade system was defined by the Inter-Cantonal Conference for Administrative Sanctions and primarily

⁸ Message of the Federal Council, March 13, 2000 about the popular initiative 'Strassen für alle' (BBl 2000 2887).

⁹ The introduction of a cascade system included the definition of nationwide minimal sanctions and a stepwise increase of the minimal sanctions for repeat offenders.

based on cantonal experiences with license suspension. The designing of the *two-phase driver training system* was inspired by performance information from other jurisdiction (mainly from the U.S.A. and New Zealand) and new information produced during the process. Interview statements indicate that the existing systems were estimated as not transferable to Switzerland. The stepwise removal of restrictions such as night curfew or lower BAC limit for new drivers was considered as not compatible with the Swiss tradition. Therefore, a new model with a provisional licence for three years combined with a mandatory advanced education in the second phase was elaborated including a study that investigated the practicability and acceptance of an advanced education by the participants (Bächli-Biétry 1998). The interviewees considered this study as useful to define but also to legitimize the advanced education. Finally, performance information played a moderate role in the case of the *reduction of the BAC limit*. Interviewees pointed out, that since years or even decades, traffic safety experts agreed that the lowering to 0,05 percent is empirically justified based on performance information but also on findings from traffic medicine. Interviewees attributed only moderate significance to performance information due to the lack of comprehensive European or even Swiss findings. In the parliamentary process, the parliamentarians' attention was concentrated on the reduction of the legal BAC limit, the two other measures passed without an intense debate. The parliamentary debate about the BAC limit was rather driven by emotions and personal experiences than by performance information.

Evidence-based Policy-Making as Exception in the Field of Health Policy?

Although evidence-based policy-making originated from 'evidence-based medicine', performance information played only in one cases a significant role. However, the analysis covers only four policy measures adapted in two revisions, namely the revisions of the Law on Narcotics 2008 and of the Law on Sickness Insurance 2008. Furthermore, health policy is a broad field and the analysis could differentiate between particular subfields such as drug policy or health service provision. Our analysis shows that at least in the subfield of drug policy, both extreme – significant influence and no influence – can be observed (see Table 2).

The *Federal Law on Narcotics* (FLN) in force since 1975 was finally revised by the Federal Parliament on the 20th March 2008 after a long revision process including a failed revision proposed by the Federal Council. The successful revision of 2008 is based on a parliamentary initiative that took up the uncontested issues of the failed proposal aiming to institutionalize the so called 'four pillar drug policy' including harm reduction, in addition to the traditional elements of prevention, treatment and law enforcement. Our analysis focuses on the timely

unlimited institutionalization of heroin-assisted treatment for chronic addicts resistant to other treatments and on the measures aiming to improve the protection of juveniles from illicit drugs. The legal institutionalization of *heroin-assisted treatment* is considered as an exceptional example of evidence-based policy-making. Based on the FLN of 1975, the Federal Council could only introduce heroin-assisted treatment in form of a research trial in 1994. The trial was launched based on a review of all previous scientific experience with heroin and morphine prescribing (Mino 1990). An independent group of researcher was in charge of the evaluation and accompanied by an external scientific board to review and follow-up the scientific process (Rihs-Middle et al. 2002). Interviewees with a scientific background and from the Federal Commission for Drug Issues commended this evidence-based approach pursued by the Federal Office of Public Health. The positive effects on patients' as well as the reduction of drug-related delinquency and of the nuisance from open drug scenes are present in the documents and the interviews. Nevertheless, there are only few explicit references to studies in official documents, in the parliamentary debate as well as in interviews with parliamentarians. Interview statements indicate that the opinions were formed prior to the revision of the FLN that took place after more than a decade of experiences with heroin-assisted treatment and after popular votes on timely restricted heroin-treatment at the national and cantonal level. By the time of the revision, opposition against the heroin-assisted treatment was linked to the strong ideological position of a drug free society and abstinence only policy.

The revision of the *youth protection* measures included the introduction of severer penalties for supplying drugs to minors especially around schools and the authority to advice (Gefährdungsmeldung) at-risk people to specialized institutions was extended to professionals from the educational, social, justice and police sectors. Document analysis and interview statements consistently show that performance information was not present in the revision process. All interviewees including parliamentarians, civil servants, researchers and members of the Federal Commission for Drug Issues pointed out that the adaptation of youth protection measures within this revision was clearly symbolic and expectations about the effects of these changes in legislations were low. There was an agreement that youth protection should be improved, and that an improvement would have been also possible based on the existing law.

In the case of the *second prolongation*¹⁰ of the so called *moratorium on the authorizations of new medical surgeries* that provide outpatient services which are reimbursed under compulsory sickness insurance, the revision was dominated by political and economic interests as well as anecdotic cantonal evidence and assumptions about the effects of the moratorium. Interview statements show that civil servants and representatives of interest groups had knowledge of the existing performance information, but they emphasized that it was not influential. Furthermore, some interviewees pointed out, that an additional evaluation was planned by the Federal Office of Public Health, but not realized because of strategic and political considerations. The decision of the prolongation was shaped by the agreement that this measure is only a timely limited ‘emergency’ solution till a follow-up solution is elaborated and accepted. The following interview quotes illustrate the bargaining situation:

“The moratorium is the pledge.” (NGO, translated by the author)

“It is a political measure. It is not about facts and figures, but about the politics of power. In the context, where the Federal Council contrasts the moratorium of new medical service providers with the abolishment of mandatory contracting, an investment in evidence would politically not have paid off.” (NGO, translated by the author).

Ideological Policy-Making in the Field of Asylum Policy?

Swiss asylum policy is characterized by intensive reform activities. Since its adoption in 1979, the Federal Law on Asylum (FLA) was revised on average every three years. Thus, the possibilities of feedback loops about the implementation of the revised policy solutions were already timely restricted. The following analysis concentrates on the Austerity Program 2003 (AP 2003) and the revision of the FLA in 2005. These two revision processes overlap each other because the revision of the FLA started already in 1999. The analysis focuses on two policy measures adapted in both revisions: The coercive measures and the social assistance exclusion of rejected asylum seekers.

The *coercive measures*¹¹ mainly consisting of imprisoning aliens respectively rejected asylum seekers who refuse to follow orders to leave Switzerland were introduced in 1995 to improve the alien removal policy. In 2003, the reasons for detention pending deportation (‘Ausschaffungshaft’) were amended to provide the cantonal authorities with better

¹⁰ The moratorium was introduced in July 2002 on the basis of Art. 55a of the Federal Law on Sickness Insurance (SR 823.10) for a period of three years and extended in July 2005 for further three years. The moratorium was introduced to restrict the potential flow of physicians from the EU after the enactment of the bilateral agreements with the EU. The moratorium should also contribute to a stabilization of the increase rate of the expenditure of the sickness insurance based on the assumption of a supply-induced demand.

¹¹ ‘Coercive measures’, Swiss Law on the Residence and Settlement of Foreign Nationals (SR 142.20).

instruments to carry out deportations. Interview statements and document analysis consistently show that performance information was not present in this revision process. In 2005, the revision included major changes such as the doubling of the maximal duration from nine to eighteen months for detention pending deportation and the introduction of a new form of detention to enforce cooperation ('Durchsetzungshaft'). Interviewees from the federal administration as well as other actors pointed out, that these modifications were not based on performance information but on political ideas of the new head of the Federal Department of Justice and Police.¹² The Federal Councillor Christoph Blocher argued in the parliamentary debate that cantonal authorities and professionals did request stricter coercive measures. He referred to anecdotic evidence gathered by his visits and discussions with professionals working in detention facilities. In the last stage of the revision, when the two Chambers of the Federal Parliament sorted their differences out, one evaluation of the Parliamentary Administration Control (2005) obtained much attention and was presented by the author in several parliamentary committees. Parliamentarians against stricter coercive measures used this evaluation as a proof that stricter coercive measures do not efficiently and effectively guarantee successful deportations in the asylum sector. Parliamentarians in favour of the revision emphasized mainly shortcomings of the evaluation. The following interview quotes illustrate how two members of the parliamentary committee perceived the debate:

"Ideological considerations are often more important and you defy the studies and expertises." (Political Institutions Committee of the Council of States, translated by the author).

"I have never experienced such a debate before. [...] The liberal-conservative members did not discuss the Asylum Law, they just raised their hands." (Political Institutions Committee of the Council of States, translated by the author).

Thus performance information was not influential or even disregarded in the decision to adapt the coercive measures within the revision of the FLA in 2005.

The introduction of the so called 'social benefit stop' (Sozialhilfestopp) that excluded asylum seekers whose applications was not admitted to the asylum procedures (non-entry decisions) from social assistance is considered by the involved actors as paradigm change. Already before the Austerity Program 2003 (AP 2003), the Federal Council elaborated a revision of the social assistance system of the asylum sector,¹³ but a social assistance exclusion of certain

¹² The Federal Councillor Christoph Blocher did take over the department the 1st of January 2004, after his party, the Swiss People's Party won the elections in 2003. A stricter asylum policy was a core issue of their successful election campaign.

¹³ Message of the Federal Council about the Revision of the Law on Asylum, September 4, 2002.

groups dependent on the outcome of their asylum procedure was a ‘taboo’. The asylum sector had to contribute 140 mio. CHF to the AP 2003. Document analysis and interviews show, that the Federal Office for Refugees proposed the system change based on existing performance information about the system in place indicating that no further cost reduction was possible within the existing system. However, they did not refer to performance information about the proposed solution. They referred to statistical data, their professional experiences and international exchanges especially with the Netherlands that had already introduced such a system. Furthermore, they pointed out that this policy change was strongly linked to the normative question, if a person who does not follow the orders to leave Switzerland should be eligible for ordinary social benefits. In the policy documents as well as in the parliamentary debate, mainly non-intended negative effects were discussed and the necessity to monitor the consequences of the system change was stipulated in the law.¹⁴ Interviews clearly show that the ‘monitoring’ was proposed to build confidence and find a compromise. Thus, not existing performance information was influential but rather the strategic promise to monitor and adapt the system if necessarily.

In 2005, the social assistance exclusion was extended to all asylum seekers whose applications had been rejected. This extension was explicitly not part of the AP 2003, in contrast, the system change should first be monitored for at least three years and thereafter, an extension should be discussed based on the findings of the monitoring. This fact was emphasized by the opponents of the extension. First monitoring reports from the Federal Office in charge as well as from the main non-governmental organization, the Swiss Refugee Council, about the implementation of the social assistance exclusion of all asylum seekers with a non-entry decision were present in the parliamentary debate. However, most interviewees emphasized that these reports did not have great influence on the decision to extend the exclusion of social assistance. In contrast, the debate was primarily shaped by ideological and normative arguments.

The Power of Strong Performance Information

To identify the existing performance information, we conducted an electronic research including library catalogues, data bases as well as internet sites of research institutions and of actors of the respective policy fields. In total, we identified 174 studies; 64 (37%) contained

¹⁴ Federal Law on the Austerity Program 2003, December 19, 2003, SR 142.31.

Swiss specific performance information and 110 (63%) contained performance information from other jurisdictions. Table 3 shows that the number of studies about the individual policy measures varies considerably, both for Swiss specific and for other information. Furthermore, the number of studies commissioned by Swiss authorities varies from one to fourteen (see Table 3).¹⁵ To understand the Swiss specific context, it is important to know, that although the Swiss Constitution includes a general evaluation clause in Article 170 since 1999,¹⁶ the federal administration has no common strategy about the production of performance information (Widmer and Neuenschwander 2004).

Further, Table 3 displays the level of consistency, uncertainty and credibility and in its ninth column the characteristics of existing performance information are subsumed in an ordinal number. The level of consistency indicates on the one hand, if the findings of the different studies are corresponding with each other. On the other hand, the level of consistency also reflects the ambiguity of competing expectations about (different) effects of a policy measure and how to measure, analyse and weight the different dimensions of the policy effectiveness.

¹⁵ Explanations for the differences are manifold and also investigated by our research project (Zollinger 2009).

¹⁶ Art. 170 requires the Federal Parliament to ensure that the effectiveness of federal measures is investigated.

Table 3: The characteristics of existing performance information (PI)

Policy measure	Period	PI*	Swiss PI	commissioned by Swiss authorities	Level of consistency	Level of uncertainty	Level of credibility	Total factors enhancing the influence	Overall influence of PI	Support for H1
Speed limitation in urban areas	1989 – 01	22	15 (73%)	9	high (1)	low (1)	high (1)	3	high	yes
Cascade system	1990 – 01	14	1 (7%)	0	high (1)	moderate (0)	moderate (0)	1	low	no
Two-phase driver-training system	1990 – 01	30	5 (17%)	4	high (1)	high (-1)	no issue (0)	0	moderate	yes
BAC limit	1980 – 03	46	3 (7%)	3	high (1)	moderate (0)	contended (-1)	0	moderate	yes
Moratorium for new services providers	2001 – 08	5	5 (100%)	2	moderate (0)	high (-1)	no issue (0)	- 1	no influence	yes
Heroin-assisted treatment	1998 – 08	26	19 (73%)	14	high (1)	low (1)	high (1)	3	high	yes
Authority to advice at-risk people	1998 – 08	0	0	0	– (-1)	– (-1)	– (-1)	- 3	not present	yes
Penalties ‘supplying drugs to minors’	1998 – 08	0	0	0	– (-1)	– (-1)	– (-1)	- 3	not present	yes
Social assistance exclusion	1999 – 03	7	4 (43%)	3	moderate (0)	high (-1)	contended (-1)	- 2	low	yes
Coercive measures I	1994 – 03	8	2 (25%)	1	moderate (0)	high (-1)	contended (-1)	- 2	not present	yes
Extended social assistance exclusion	2004 – 05	8	5 (63%)	3	low (-1)	high (-1)	contended (-1)	- 3	low	yes
Coercive measures II	2004 – 05	8	5 (63%)	4	moderate (0)	high (-1)	contended (-1)	- 2	no influence	yes

* We only included, when ever it was possible, the final report of a study and not intermediate reports or different articles presenting the main results of the study.

H1 Hypotheses 1: If performance information is timely available, consistent and certain, and is perceived as credible, performance information will be more influential in policy-making.

Operationalization: The findings of the different studies were not weighted according their quality to measure their consistency, uncertainty, and credibility

Level of consistency: *low* = few findings of the different studies are consistent; *moderate* = majority of the findings of the different studies are consistent; *high* = nearly all findings of the different studies are consistent.

Level of uncertainty: *low* = few causal relations of the chain of effects are investigated by studies, effects are highly context dependent; *moderate* = some causal relations of the chain of effects are investigated by studies, moderate context dependences; *high* = main relations of the chain of effects are investigated by several studies, effects are not be highly context dependent.

Level of credibility as estimated by the involved actors in interviews and documents; *no issue* = the question of credibility was not important because performance information was considered as not relevant for other reasons (transferability, lack of new, comprehensive findings, not timely enough).

The level of uncertainty indicates on the one hand, how many of the causal relationships of the chain of effects are covered by the performance information and on the other hand, how context dependent the effects of a policy measures are. Finally the level of credibility indicates how the involved actors estimated the trustworthiness of the existing performance information.

If the characteristics of the existing performance information are consolidated to one condition, hypothesis 1 postulating that strength of the existing performance information shapes the influence of such information in legislative revisions is confirmed for eleven out of twelve cases (see Table 3, last three columns). In the case of the ‘*cascade system*’, the influence of performance information in the revision was low although existing performance information was quite strong. For this case, we found only one study about Switzerland calculating the cost-benefit ratios of a cascade systems (Eckhardt and Seitz 1998) and this study was not perceived as credible:

“We did not emphasize this prognosis of the Swiss Accident Council. That is reading in tea leaves. Therefore, we did not introduce this argument in the parliamentary debate.” (Federal administration, translated by the author).

In contrast, the credibility of the findings about other jurisdictions, mainly from the U.S.A., was not contested by the involved actors. Performance information about *administrative sanctions* shows that licences suspension is more effective than jail or fine alone and reduces recidivism among first and repeat offenders (for instance Mann et al. 1991). However, the findings are not totally consistent concerning the magnitude of the effects; this applies especially to the effects of progressively stiffer sanctions on multiple offenders. Thus, there are uncertainties about the most effective combinations of sanctions and no clear recommendations how the sanction systems should concretely be designed (categorizations of offences and respective sanction durations). These remarks illustrate that existing performance information was only limited applicable to design a sanction system. However, interview statements and document analysis indicate, that involved actors did not (systematically) delve into the existing performance information.

According to the hypothesis 1, the strongest performance information played the most significant role in legislative revisions, namely in the cases of ‘*speed limitation in urban areas*’ and ‘*heroin-assisted treatment*’ (see Table 3). For instance, in the case of the ‘*heroin-assisted treatment*’, all findings document the feasibility of the treatment, the positive changes in patients, the safety of medication and the absence of major negative events. Continued

research covered among other issues the positive long-term effects for the patients in heroin-assisted treatment (Güttinger et al. 2003) and the reduction of drug-related delinquency in cities (Killias et al. 2002). The credibility and acceptability of the findings were further increased by publications in peer-reviewed journals. Like the following interview quotation shows, even parliamentarian against heroin-assisted treatment did not try to argue against the findings, but emphasized that it is not a question of evidence but rather of moral value:

“We can not celebrate such a success. We think state should intervene earlier and not prescribe drugs to addicts.” (Committee of Social Security and Health of the National Council, translated by the author)

In two of the three cases where performance information was not present in the revision processes, we did not find performance information too. In the case of ‘*coercive measures I*’, where performance information was not present in the revision process, we identified few studies containing performance information. However, the existing studies, mainly about other jurisdictions, provided inconsistent results with respect to the deterrence effect of coercive measures on potential asylum seekers. Most of the other effects of the coercive measures were only covered by a single study. Due to the complexity of the asylum systems, the transferability of results from other jurisdictions concerning one element of the system was in general highly contested by the interviewees.

Our results suggest that the strength of the existing performance information is a powerful condition to explain the role of performance information in legislative revisions. These findings point out that feedback loops – learning across time and space based on systematic investigations on ‘what works’ – were not possible in every case because of a lack of strong evidence. The marginal influence of performance information in the revisions of the asylum policy measures are at least partially explained by the weak existing performance information. These findings indicate that socio-political fields with a high ideological and political connotation, such as asylum policy, are already not oriented towards the generation of performance information (see also Zollinger 2009). The political nature of decision making might already hinder the production of performance information and not only the influence of existing performance information in decision making.

To sum up, our analysis demonstrates that the availability of performance information can not be taken for granted. However, we would like to point out that the classification of ‘strong’ respectively ‘weak’ performance information is of course a question of interpretation and weighting. How many studies, what kind of studies or how many intended and non-intended

effects have to be investigated that the existing performance information is classified as strong evidence? Our analysis focuses on the sum (bases) of performance information without weighting studies according their quality and thus, a single very consistent, comprehensive and credible study might be obscured by a few not consistent, incomprehensive and not credible studies. However, interviews and document analysis did not provide insights supporting this problematic.

Diffusion of Performance Information by Mass Media: An Overestimated Condition?

Preliminary empirical findings about the diffusion of performance information by the three biggest Swiss German newspapers are disillusioning: We found few articles referring to the identified performance information (see Table 4). References did not have to be a complete bibliography, in contrast, we coded articles as ‘diffusion of performance information’ that mention a ‘study’ or ‘investigation’ measuring performance information without any further details about the author, title etc. Table 4 shows, on the one hand, that diffusion of performance information by newspapers was relatively intense in the cases of the two policy measures with strong bases of performance information and where performance information played a crucial role in policy-making, namely ‘*speed limitation in urban areas*’ and ‘*heroin-assisted treatment*’. Nevertheless, the total number of articles containing a reference is low, especially if related to the investigated publication periods that cover a decade or more for these two cases. On the other hand, diffusion was also comparably high for two policy measures with weak bases of existing performance information and where performance information was not influential, namely the ‘*extended social assistance exclusion*’ and the ‘*coercive measures II*’. Those studies referred to in the newspapers, were also present in the revision process but not considered as influential.

Table 4: The reporting on performance information (PI) in the three biggest Swiss German newspapers

Policy measure	Publication period	Articles about the revision process	Articles with references to PI
Speed limitation in urban areas	1989-2001	194	16 (8%)
Cascade system	1990-2003	133	0
Two-phase driver-training system			2 (1%)
BAC limit			5 (4%)
Moratorium for new medical service providers	2001-2008	92	3 (3%)
Heroin-assisted treatment	1998-2008	168	38 (23%)
Authority to advice at-risk (young) people			0
Penalties 'supplying drugs to minors'			0
Social assistance exclusion	2000-2003*	85	0
Coercive measures I			0
Extended social assistance exclusion	2000-2005	184	32 (17%)
Coercive measures II			16 (9%)
* Additional newspapers were included. Data source: Mirella Schütz 2009, amended by the author.			

In general, interviewees from the administration, specialized agencies and NGOs pointed out, that mass media is not an important channel providing them with new, unknown performance information. In contrast, they actively tried to generate media attention for performance information. In general, this group of actors did neither observe major distortions of the findings nor critical comments on the validity and reliability performance information by newspapers. These perceptions are supported by the media content analysis. Interviewees from specialized agencies and NGOs emphasized that mass media is an important channel to diffuse performance information to parliamentarians:

“It is much easier to inform parliamentarians about a study or an expertise through mass media than by sending it directly to them. They will not read the entire study.” (NGO, translated by the author).

Interview statements from members of the parliamentary committees are more ambiguous. However, no interviewee attributed great influence of media diffusion of performance information. The documentation by the federal administration and the committee secretariat are considered to be more important than media reporting. Furthermore, some interviewed parliamentarians pointed out that personal contacts and their issue-networks including professionals and cantonal or communal authorities are the most important information sources. The two studies that were most often actively remembered and mentioned in the interviews with parliamentarians were part of the committees' documentations. These two studies – an evaluation of the coercive measures by the Parliamentary Administration Control

(2005) and the monitoring of the social assistance exclusion by the Federal Office of Migration (2005) – had attracted also some media attention. In the case of the evaluation of the coercive measures, newspapers emphasized that the effectiveness of an extension of the detention pending deportation can be doubted based on the findings of this evaluation. Nevertheless the majority of the Federal Parliament voted for an extension.

To sum up, our results suggest that print media did neither function as a diffusion channel nor as an important trigger enhancing the influence of performance information in legislative revisions. Articles referring to performance information were too scarce to fulfil these functions, and thus, the respective hypotheses are rejected. However, our analysis might underestimate the functions of mass media because we did focus too strictly on references to performance information. Newspapers can of course report on policy performance without any references to studies, investigations, trials etc. and in this way, influencing legislative revisions in the direction of the performance information. Interview statements as well as newspapers articles about the heroin-assisted treatment indicate that the success of this treatment was often acknowledge without any explicit references to its scientific evaluation.

Political Context: Which Combination of Factors is Conclusive?

Following the information-based conditions, we now turn to the set of variables that are context-based conditions.

Institutional setting: ‘Evidence-oriented or norm-driven?’

Generating and processing performance information requires capacities including personal, financial as well as organizational structures dedicated to this issue. The value of research-based information and in particular performance information has to be acknowledged by the (in-)formal organizational structures respectively the involved people. Table 5 shows that the capacities to generate and process performance information varied among the different policy fields investigated. In the fields of traffic safety and health policy the federal offices in charge had established, at least to a certain degree, an orientation that facilitates the uptake of performance information. They have some capacities to generate and process such information, and are closely linked to institutions that promote the accumulation, selection and interpretation of systematic evidence. However, both offices in charge had no explicit case independent strategy when and how performance information should be generated, selected and interpreted. In contrast, in the field of asylum policy, the majority of

interviewees considered the capacities to generate and process such information as low. Furthermore, many interviewees stated a further decline of capacities after 2003 linked to the change of the head of the department. Interview statements indicate that scepticism regarding performance information, social science and qualitative research in particular predominated in the federal offices in charge. The following interview quotes illustrate this orientation:

“There was no interest to investigate the effects. In contrast to other domains, there was no culture of evidence-based decision-making.” (Researcher, translated by the author).

“The Federal Office for Refugees is strongly influenced by lawyers, who are more interested in norms and not necessarily in effects. They were not interested in social sciences and were very sceptical with respect to such findings.” (Federal administration, translated by the author).

At the level of the individual policy measure, we argued that if an evidence-oriented administration supported by a policy forum plays a decisive role in an early stage of the revision process, learning by performance information is more likely and performance information will be more influential in this revision process (see hypothesis 3a). Table 5 shows mixed results for this hypothesis.

On the one hand, in the two revision processes, *‘limitation in urban areas’* and *‘heroin-assisted treatment’*, in which performance information was most influential, the administration played a decisive role and was supported by an expert forum. In both cases, interviewees emphasized the good relationships between the federal offices in charge and the producers of Swiss specific performance information. Furthermore, the federal offices in charge commissioned the studies that were perceived as most influential in the revision processes by the interviewed actors. Furthermore, the institutional setting might also explain why performance information played only a moderate or marginal role in the cases of the *‘BAC limit’* respectively *‘moratorium for new service providers’*: In both cases the administration played no important role.

On the other hand, a decisive evidence-oriented administration supported by an expert group does not automatically lead to a significant role of performance information in the revision process as revealed by two cases (see Table 5). In the case of the *‘authority to advice at-risk people’*, no performance information was available (see Table 3 on page 11). Thus, the crucial question is either why the evidence-oriented administration did not generate performance information or, why the administration promoted this revision without performance information? In the case of the *‘cascade system’* performance information was available and consistent but played only a marginal role although the administration was decisive and supported by an expert group.

Table 5: The institutional setting shaping the influence of performance information (PI) in legislative revisions (hypothesis 3a)

	Capacities	Role of the federal office in charge	Role of expert groups	Influence of PI in pre-parliamentary phase	Overall influence of PI in the revision process	Support for H3a
Speed limitation in urban areas	high	important	important	high	high	yes
Cascade system	high	important	important	low	low	no
Two-phase driver-training system		important	important	moderate	moderate	partially
BAC limit		marginal	marginal	moderate	moderate	partially
Moratorium for new services providers	high	marginal	not present	low	no influence	yes
Heroin-assisted treatment	high	important	important	high	high	yes
Authority to advice at-risk people		important	important	not present	not present	no
Penalties ‘supplying drugs to minors’		marginal	marginal	not present	not present	yes
Social assistance exclusion	low	important	marginal	low	low	yes
Coercive measures I		important	important	not present	not present	yes
Extended social assistance exclusion	low (or even no)	marginal	not present	low	low	yes
Coercive measures II		marginal	not present	low	no influence	yes
<p>H3a Hypothesis 3a: If an evidence-oriented administration supported by a policy forum plays a decisive role in an early stage of the revision process, learning from performance information is more likely and performance information will be more influential in the revision process.</p> <p>Operationalization: <i>Capacities</i>: Estimation of the interviewed actors and secondary (grey) literature. The levels ‘high’ respectively ‘low’ represent relative values. <i>Role of federal office in charge</i>: <i>Marginal</i> = following the interview statements and documents, the federal office in charge played only a marginal role in the revision process, the parliament did not follow its policy proposal; <i>important</i> = following the interview statements and documents, the federal office played an important role in the revision process, the Federal Parliament followed its policy proposal to a large extent. <i>Role of expert groups</i>: <i>Not present</i> = there was no expert group; <i>marginal</i> = following the interview statements and documents, the expert group played only a marginal role in the revision process, the Federal Council and/or the Federal Parliament did not follow its policy proposal; <i>important</i> = following the interview statements and documents, the expert group played an important role in the revision process, the Federal Council and the Federal Parliament followed its policy proposal to a large extent.</p>						

Characteristics of the Policy field and the Policy Measure: No conclusive findings yet

As already outlined above, the analysis reveals that the policy field has a considerable impact on the influence of performance information in legislative revisions. Further, the analysis suggests that the policy field has not only an impact directly on the consideration of existing performance information in policy-making but also on the generation (availability) of performance information and the evidence orientation of the administration.

To deal with the observed differences within a policy field, we introduced the characteristics of the policy measure such as the scale of change, the intrusiveness and inclusiveness of the policy design and the level of conflict about the revision of the policy measure (hypotheses 3b). Table 6 shows that none of the policy characteristics explains alone the observed differences. For instance, the analysis reveals that the conflict intensity is not the all-dominant factor hindering performance information to become influential: In the highly contested revision of the ‘*BAC limit*’ and the ‘*heroin-assisted treatment*’, performance information had a moderate and in the later case even a significant influence in the respective revision processes. These two processes have in common, that performance information was available already years before it was finally reflected in the federal legislation. Thus, argumentation and probably learning required a long period in the context of conflictive debates including ideological and emotional considerations about the way of life and economic interests in the case of the BAC limit. In all other cases with a high or moderate level of conflict, performance information was not or only moderately influential. Not surprisingly, the absence of a conflict does not automatically lead to a high influence of performance information.

If we assume that three out of four investigated characteristics of the policy measure might affect the role of performance information in a string way, only five out of twelve cases support the postulated hypothesis 3b (see Table 6, second last column). The two cases coming close to the ideal of evidence-based policy – ‘*speed limitation in urban areas*’ and ‘*heroin-assisted treatment*’ – support both hypothesis 3b and are connected to a minor change and a low level of intrusiveness but differ with respect to the level of conflict and the level of inclusion related to the policy measure.

Table 6: The policy characteristics shaping the influence of performance information (PI) in the legislative revisions (hypotheses 3b)

	Scale of change	Intrusiveness	Inclusion	Conflict level	Influence of PI in Pre-parliamentary	Overall influence of PI	Support for H3b	Support for Hypothesis 'level of conflict'
Speed reduction in urban areas	marginal	low*	moderate	low	high	high	yes	yes
Cascade system	major	high	low	low	low	low	partially	no
Two-phase driver training	major	high	high	moderate	moderate	moderate	no	yes
BAC limit	marginal	high	high	high	moderate	moderate	no	partially
Moratorium for new services providers	marginal	high	moderate	moderate	low	no influence	partially	yes
Heroin-assisted treatment	marginal	low	low	high	high	high	yes	no
Authority to advice at-risk people	marginal	low	low	low	not present	not present	no	no
Penalty 'supplying drugs to minors'	marginal	high	low	low	not present	not present	no	no
Social assistance exclusion	major	high	low	high	low	low	yes	yes
Coercive measures I	marginal	high	low	moderate	not present	not present	no	partially
Extended social assistance exclusion	major	high	low	high	low	low	yes	yes
Coercive measures II	major	high	low	high	low	no influence	yes	yes
<p>* If a speed reduction is implemented, it is, of course, binding for all car drivers and thus, it is intrusive. Nevertheless we coded here a low level of intrusiveness because the communes/cantons do not have to implement such speed reductions; the federal law provides the possibility to implement such regimes.</p> <p>H3b Hypothesis 3b: The degree of the policy field's affinity to technology, the scale of change, the inclusiveness and intrusiveness of a policy measure and the level of conflict will affect the role of PI in legislative revisions. (yes = three out of the four dimension affect the role of PI as postulated).</p> <p>Hypothesis 'level of conflict': In a highly conflictive context, performance information is less likely to be influential in the revision process.</p> <p>Operationalization: <i>Scale of change:</i> <i>Marginal</i> = no changes with respects to the aims of the policy measures, slight adaptation of the existing policy instruments; <i>major</i> = changes with respects to the aims of the policy measures and/or fundamental changes of the policy instruments (e.g. introduction of new instruments). <i>Intrusiveness:</i> <i>Low</i> = policy measure has not a coercive character for the direct policy addresses; <i>high</i> = policy measures is highly coercive for the direct policy addresses. <i>Inclusion:</i> <i>Low</i> = direct policy addresses are a well defined, small group of people (e.g. rejected asylum seekers); <i>moderate</i> = a considerable group of people belong to the direct policy addresses; <i>high</i> = large part of the resident population belongs to the direct policy addressees (e.g. driving population). <i>Conflict level:</i> <i>Low</i> = No noteworthy opposition (small number of votes against the proposal in the national council), no procedure of ironing out differences between the two chambers of the Federal Parliament took place and no referendum was held; <i>moderate</i> = no referendum was held, but the policy proposal was either not supported by a 2/3-majority of the national council or a procedure of ironing out differences on essential elements of the policy proposal took place; <i>high</i> = the policy proposal was not support by a 2/3-majority of the national council and a procedure of ironing out differences took place or a referendum was held.</p>								

In several cases the influence of performance information was lower than we would have expected based on the political context conditions. However, these cases except one ('cascade system') can be explained if the condition 'characteristics of existing performance information' is also taken into account. In the case 'cascade system', we observed only a low influence of performance information although performance information was available and the political context with respect to the level of conflict and the level of inclusion rather favourable. Document analysis and interview data indicate that performance information was neglected in this case in favour of professional experiences of the cantonal authorities.

Finally, empirical insights, mainly interview data, reveal that the complexity of the policy measure respectively of the problem to solve might be a further variable that should be considered in the analysis. In six out of eight cases in which performance information played no or only a marginal role, interviewees emphasized the problem of the transferability of findings from other countries due to the high diversity and complexity of the issue at stake (asylum legislation and the system of the provision and financing of medical services). Furthermore, they pointed out that causal frameworks (chain of effects) of the policy measures are complex and additionally, that the effectiveness of this policy measure are influenced by other policy measures and various context factors which can not be controlled or influenced by the state.

Conclusion

The evidence-based policy movement raises new research interest in a realistic view of the influence of research-based evidence on 'what works', so called performance information, in democratic politics. Insights about the realization of evidence-based policy can contribute to the debate on the desirability, challenges as well as pitfalls of evidence-based policy-making. Findings can help to clarify the potential of evidence-based policy with respect to the functioning of the democratic process, such as accountability and responsiveness but as well as its capacity to improve policy solutions, creating or resisting policy failures and thereby support the output-oriented legitimacy (see also Widmer forthcoming). In this context, the aim of this paper was to assess and explain the influence of performance information in legislative revisions at the Swiss federal level. Existing literature does not propose a comprehensive, accepted theoretical framework for such an analysis (see for instance James and Jorgensen 2009), therefore we elaborated an integrative framework inspired by the idea of

an information flow taking place in a political context. The empirical analysis of the twelve cases of revisions of policy measures revealed that this framework is appropriate and promising for the analysis of such a multifaceted, cognitive phenomenon.

As expected, the investigation showed that the influence of performance information varied not only between policy fields but also within a single policy field. There is support for the hypothesis that the characteristics of the existing performance information are a powerful explanation for the influence of performance information in legislative revisions. The influence of performance information varied in accordance with the strength of the existing performance information in eleven out of twelve cases. Thus, this analysis supports existing research concentrating on the characteristics of evidence (Weiss and Bucuvalas 1989, respectively more recently Esterling 2004). However, the presented analysis faces some limitation because it did not weight the different studies according to their quality to measure the strength of existing performance information.

Further, this investigation revealed that it can not be taken for granted that performance information is available, neither about the policy measure in place in Switzerland nor about the same or other policy solutions implemented in other jurisdictions. This finding challenges the concept of evidence-based policy that assumes the availability of performance information.

The analysis of newspaper reporting on performance information showed that the power of mass media enhancing the influence of performance information in policy-making might be overestimated in literature. Newspapers did report only very rarely on performance information. The question arises, if the framework should instead of emphasizing the functions of mass media more focussing on other information channels. To substantiate such a framework modification, a more detailed media content analysis would be appropriate. The analysis presented in this paper faces a limitation in concentrating on references to performance information. The content analysis did not require a reference with a complete bibliography, but an indication that the performance of a public policy was reported based on an investigation. Therefore, an analysis on media reporting about the policy performance without any references to systematic evidence would complete the picture and help to evaluate the role of mass media also from a democratic theory standpoint of view. These preliminary findings indicate that newspapers are not interested in informing the citizens about the known, evidence-based consequence of a policy measure and in this respect, the findings are quite disturbing.

The analysis further provided quite conclusive results with respect to the impact of the policy field and the institutional setting on the influence of performance information in legislative revisions. The findings revealed that the policy field, its affinity to technology and science has a strong impact not only on the uptake of existing performance information in the revision process but also on the evidence-orientation of the administration and the generation of performance information. Following these considerations, the framework can be modified by postulating these interdependences explicitly. The test of the hypothesis that policy characteristics shape the influence of performance information in legislative revisions is not yet conclusive and needs further theoretical and empirical analysis. Further analysis will differentiate more with respect to the involved actors (differentiate between type of actors, number of involved actors), the phases of the revision processes as well as to the performance information explicitly present and influential in the processes.

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Appendix

Table 7: Composition of the selected interviewees

Case: Policy measure	Producers of PI, researchers*	Other involved actors**	Federal offices	Parliamentary committees	Total
Speed reduction in urban areas	2	4	2	--	8
Cascade system	1		2		3
Two-phase driver-training system	1		3		4
BAC limit	1		3		4
Moratorium for new service providers	1	4	1	3	9
Heroin-assisted treatment	3	1	1	3	7***
Authority to advice at-risk people	3	1	1	3	7***
Penalty "supplying drugs to minors"	3	1	1	3	7***
Social assistance exclusion	1	3	7	4	15
Coercive measures I	2	2	6	4	14
Extended social assistance exclusion	1	3	3	5	12
Coercive measures II	2	2	3	6	13

In total 45 interviews were conducted within our research project, 35 by Kathrin Frey and 10 by Christine Zollinger as part of her master thesis. She kindly provided the interview data for this analysis. Some interviewees provided us with insights for several policy measures.
 * Producer of PI and researcher who are not employees of a federal office.
 ** E.g. interest organisations, expert commissions, cantonal authorities
 *** One of the interviewees was at the same time producer of PI as well as member of the parliamentary committee in charge of the revision