

Título: *“Changes on European Road Safety Policy: from the paradigm shift to the widespread of the national policy impacts”*

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Resumen: The present paper shows the new European safety paradigm in order to search for domestic and national policy impacts. In this sense, the EU has set itself an ambitious target of halving the yearly number of fatalities. Because of it, a significant progress has been achieved across the EU, and the action has therefore been considered as a strong catalyst of efforts made by Member States to improve an important part of integration process.

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Palabras clave: Road Safety Policy; National Policy Impacts; European Union; Policy constraints; Policy harmonization

Introduction: some questions about road safety policy

Speaking about European road safety usually is understood as a question of public health only. However, when paradigm shift changes occur, the widespread of consequences are much more important, because of the impact over this public policy. A paradigm shift (a fundamental change in the way problems are defined and potential solutions evaluated) is occurring in road safety analysis.

The old paradigm assumes that road policy must be national policy, since the estimated annual direct and indirect cost of road traffic injuries in the European Union (EU) exceeds € 130 billion, or over 1% of the EU Gross Domestic Product (GDP) in 2014, which is becoming increasingly socially unacceptable to justify to citizens. From this perspective, a large number of road safety programmes have been launched and put into effect.

We can define “road safety policy” as an area of government activity, geared at reducing the number of road crashes and crash victims on the national territory and in the population. Thus, road safety policy is justified by its outputs in terms of measures or action programmes which are implemented to prevent or reduce road crashes, crash fatalities and injuries. The road safety policy is complex and includes sets of components described as “policy-making tasks” and “Transversal processes”, as well as the organization necessary for these components to develop and produce the desired outputs.

Policy-making can be defined as a cyclical series of tasks. The cycle goes from “agenda setting” to “policy formulation”, then to “policy adoption”, “policy implementation” and finally “policy evaluation” before the cycle begins again.

In the agenda setting stage road safety is identified as a major public health problem. It is described, measured and analyzed; efforts are made to understand its nature and evolution over time. Governmental communication emphasizes the importance of the issue and provides justification for future public action in order to gain citizens’ support for it. Road safety thus becomes a public policy area and steps are taken at a high political level to initiate action and provide the conditions required for its completion.

In the policy formulation stage, a number of objectives are devised and among the available options for reaching these objectives, the choice of means is made after thorough consideration of the various alternative modes of action, their primary (intended) and secondary (un-intended) consequences. It is to be noted that this “instrumentally rational” definition of the policy formulation process implies that factual knowledge (or evidence) is collected as a basis for all choices to be made, which is one criteria of “good practice”. Policy objectives may be short, medium and long term and the rational solution may prove different according to the situation in each country. This can be because of the current characteristics of the road safety problem, or the previous and present road safety measures or interventions. The eventual policy may thus include some or all of the following components: a long term vision, a strategy in terms of specific issues to be addressed or main principles and sectors of intervention, a short-to-medium term goal (defined by a quantitative target), a short-to-medium term multi-sectoral or “integrated” action programme, priority sectoral interventions, and provisions for implementation.

In the policy adoption stage, each policy component needs to be formally adopted by the adequate decision-makers in order to be implemented. For the road safety policy elements requiring adoption at the national level (on which our model focuses), the Government, the Parliament or other adequate decision-maker needs to undertake multi-sectoral consultations and may have to seek for legislation to evolve. The contents and the shape of the adopted policy components may have to seek for legislation to evolve. The contents and the shape of the adopted policy components may differ from the original draft formulation due to external constraints or possible changes resulting from the stakeholders, in order to ensure that the goals will be reached. This task may overlap with policy formulation through a feed-back process.

In the policy implementation stage, the adopted policy components are put into use. The factors which may slow down the application or reduce the efficiency of the road safety measures (such as resistance from some parts of the society and the media, lack of motivation or of knowledge of actors, insufficient budget allocation or human resources, etc.) have to be controlled and countered, which might imply some preliminary action. The number of actors, including various stakeholder groups, involved in implementation increases alongside with the complexity of the policy. To avoid the risk of a substantial policy adoption-implementation gap all actors need support and any

necessary links between them have to be established. The competent road safety authority (which can only be a government structure given the nature of its tasks) thus has to mobilize actors, set timelines for the implementation of each policy component, provide the necessary legal or regulatory framework and technical guidelines or standards, allocate funds, provide special training where needed, monitor the implementation processes and ensure that operational interventions are consistent with the adopted policy.

Road safety policy evaluation includes two types of tasks addressing two separate goals: on one hand, monitoring is intended to check whether implementation is proceeding according to plans, is likely to reach its goals, and whether potential undesirable side-effects are kept under control. This may lead to revisions of some policy components or of their implementation conditions. Monitoring is a continuing, or a periodical task, which may be formalized.

On the other hand, longer term “product” evaluation is aimed at checking that the quantitative targets in terms of crash and injury reduction are reached. Furthermore, the evaluation is designed for assessing the efficiency of various specific interventions and for learning from the experience. The new situation after the implementation of the policy is the starting point for a new policy-making cycle.

To accomplish these policy-making tasks, some specific management processes are necessary. Each of these processes participates in several tasks (or stages) of policy making, but have a life of their own and thus need to be developed as individual entities. Related to this, four main processes have been identified: inter-sectoral coordination, consultation of stakeholders, knowledge production and use and capacity building.

Inter-sectoral definition in a national level: implications on road safety policy

Intersectoral decision-making is first required at a high level to set up goals, define a strategy, adopt a challenging quantitative target, and adopt a multi-annual inter-sectoral action programme or other suitable policy solutions to reach the target. This calls for a formally established intersectoral structure with identified leadership and full responsibility for road safety. Thus, the structure should be a part of decision-making chain and therefore it belongs to government. All government sectors taking part in road

safety action must be represented in it, so that all the actors involved at this level know, understand and agree on their particular role in policy formulation and implementation. The members of this structure need full authority in their sector for implementing the adopted policy; in particular, they will have to organize their overall load of sectoral activities to accommodate the road safety ones at the correct priority level. The structure must have appropriate logistics to function: a secretariat, technical and scientific support, a budget for communication, etc. Finally, there must be procedures, or at least a well-defined process, to follow up in the next stages of policy formulation and implementation.

Related to consultation of stakeholders, there must be spoken about two things: “bottom-up approach”, and “top-down approach”. In the “bottom-up approach”, the initiative lies with the non-governmental stakeholders who may advocate for road safety or lobby on an issue, undertake some action of their own or develop policies and implement them. These activities may help decision-makers grant a higher priority to road safety in public policies at the agenda setting stage. The potential effects of these initiatives may be taken on board when quantifying targets and selecting solutions at the policy formulation stage. Some stakeholders may also be called to participate in the implementation of particular components of the national policy adopted.

In the “top-down” approach the initiative lies with governmental actors then adapt or negotiate the policy components before their adoption to overcome obstacles and to ensure that local policies will contribute to the overall target, rather than contradict the national policy. Thus they benefit from the competences and motivation of key non-governmental stakeholders to enrich the policy and facilitate its adoption and implementation. The governmental actors need to establish an inventory of stakeholders interested in the goal or the measures to be implemented. The governmental actors need to establish an inventory of stakeholders interested in the goal or the measures to be implemented, in the targeted road users, or in the implementation conditions, so that they can seek the support of these stakeholder groups for the national policies.

Both of these approaches may be informal, in which case there is a risk that the most vocal stakeholders are the most influential; or they may be performed as systematic and organized processes. Empirical experience has shown that it could indeed be practical to involve stakeholders in a systematic way at an early stage in policy-making.

Road safety is a multi-disciplinary field of research, so knowledge production is teamwork, which requires an appropriate multi-disciplinary framework. Based on experience, a set of criteria for “good practice” can be proposed. There is one or several independent and sustainable multi-disciplinary scientific institutions carrying out road safety research on a continuing basis, so that the needed skill set can develop and research results are stored and memorized. A significant government road safety research budget is allocated to this institution to ensure that research anticipating the needs of, and supporting, decision-making is performed in adequate research conditions.

The existence of a capacity building process to provide specialized knowledge to current or future road safety actors is in itself “good practice” as it is a systematic way to ensure that all actors with a part to play in road safety do it on sound methodological basis and with a common understanding of the scientific bases of their work. More precisely, two criteria of “good practice” in capacity building applied to human resources can be defined: ensuring that the policy is knowledge-bases; ensuring that road safety work is effectively and efficiently carried out at all levels so that expected effects on the road crash and injury situation are actually obtained. This means bringing up human resources working in road safety at all stages of policy-making to adequate levels , both in number and in qualifications. It also entails providing differentiated training to all categories of actors involved.

The policy-making tasks and processes that have been described so far require an enabling organizational setting, which is the backbone of the road safety policy. Whatever the particular national characteristics might be, this system is a complex institutional structure involving cooperating and interacting bodies which supports the tasks and processes necessary to the prevention and reduction of road traffic injuries.

The road safety policy is linked to this environment, such us other areas of government, the stakeholders and the civil society. It is further characterized by its formal structure, the people and the interrelations those people established with each other. Road safety policy must be designed to support the essential processes and the policy-making tasks enabling the government to reach the objectives set for road safety.

Inter-sectoral coordination of road safety policy: pre-conditions for an efficient policy

The legal and regulatory aspects of the road safety policy should not be neglected. A form of organization supporting inter-sectoral coordination or consultation of stakeholders cannot be integrated into the classical hierarchical administrative patterns but requires transversal linkages, which may substantially modify work practices of the involved actors. Thus, legislation or at least regulations have to formalize the new institutional structures, the new set of responsibilities, and financial and human resource allocation. Adopting a long-term vision for road safety further supports sustainability.

There are some pre-conditions that are necessary for the establishment of an effective and efficient road safety policy: the first pre-condition is that there is a political will at the higher level. Political will is hard to measure but it can be assessed through its outputs. We can make the hypothesis that the following elements indicate that such a political exists: a lead agency responsible for road safety at the government level; a long-term vision enduring political and government changes; a compelling quantitative target, challenging but achievable and commitment of the higher levels of government to reach it; a national road safety programme adopted at government level; a well-defined and realistic funding scheme; efficient, precisely defined coordinating structures at all necessary levels, identifying key sectors and actors that are involved and detailing their roles and responsibilities; a system for monitoring progress in realizing targets and providing feedback to the agencies in charge of implementation; and a strong process of knowledge transfer.

The second pre-condition is the existence of a climate or of a road safety culture, shared by the road safety actors and the road users, such that policy adoption becomes smoother and policy implementation feasible. Public approval of road safety goals and policy relies on their knowledge of road safety issues, so that they can form an opinion, which implies that a process of knowledge transfer has taken place from the government, supported by scientific and technical staff, to the public. Other stakeholders may take part in this activity. A favorable climate for road safety encompasses: an active information policy by the government, scientific agencies and other relevant stakeholders; a long-term goal or vision prepared by the government and acted in parliament; and a national road safety strategy and multi-annual programme emphasizing the notion of “safe mobility system”, which means focusing on the provision of road, traffic, and transport environment as well as on individual road-user behavior.

In some countries, these pre-conditions may already be met at the onset of the policy-making cycle; they can nonetheless be enhanced at the agenda setting and implementation stages. In other countries, building up political will is a process in itself, if its current weakness prevents coordinated road safety policies from being formulated, adopted or implemented.

The EU road safety target: the new paradigm

Paying attention to the European road safety, quantitative targets represent the results that policy makers wish to achieve for a certain geographic area in a certain period. The establishment of threshold values and quantitative targets is a catalyst for the efforts of the different agents involved in road safety, aware that individually they would not have a direct bearing on the outcome of road safety programmes. It has been found that the most ambitious quantitative targets generate a greater impact on the policy makers and on the implementation of safety programmes. Countries that set out to improve road safety by implementing specific policies and defining clear targets were successful in reducing road mortality, e.g. the UK in 1983, Spain in 1991 and the Netherlands in 1972. Setting targets of road safety is an attractive idea which requires strong political commitment, although this was not the case in Norway. Given this scenario, the European Union set itself the target of halving the number of fatalities between 2000 and 2010. This goal was reflected in the White Paper “European transport policy for 2010: time to decide”. In this document are designated the national or local authorities as being responsible for achieving the proposed goals in each country. The Commission also reserved the right to propose regulatory measures in the report of 2005 if the number of fatalities were not reduced, mainly in the candidate countries. The White Paper does not specify how this target should be achieved, so each Member State could consider that its aim is to halve its own number of road fatalities.

It is believed that our goal of reducing road mortality, which effectively shapes a country’s road safety policies, should differ for each geographic area. The higher the mortality rate in a given area, the more ambitious that area target should be, considering that geographic areas with highly ambitious quantified road safety targets have been more successful than areas with less ambitious or non-quantified. The reduction, therefore, should not be linear of the same for all Member States, as it is neither fair nor

logical to obligate countries with lower road mortality rates to reduce them by the same percentages.

The states with the highest initial rates should make a greater effort to reduce them.

As background for weighted overall policies, we highlight the EU energy policy, provided for in the “Directive of the European Parliament and of the Council on the promotion of the use of energy from renewable sources amending and subsequently repealing Directives 2001/77/EC and 2003/30/EC”. The Directive sets an overall EU target of 20% target for the overall share of energy from renewable sources, and determines weighted or individualized targets for each Member State according to their GDP.

All that we have seen before are focused to try to find a new paradigm in the knowledge area of road safety which could become to higher national impacts. For this target, the European White Paper takes the heritage from Norway and Sweden of alternative strategies for road safety policy. In these countries, can be found four main measures which are the next: Continuing current road safety policy the business-as-usual strategy; basing road safety policy strictly on cost–benefit analyses, the cost–benefit strategy; Basing road safety policy on the principles of Vision Zero, the Vision Zero strategy; Implementing all potentially effective road safety measures to the maximum conceivable extent, the maximum safety potentials strategy.

Each of these strategies was assumed to apply for 10 years, and each strategy consisted of a number of road safety measures that were regarded as potentially effective.

A measure was classified as potentially effective if evaluation studies have found that it reduces the number of accidents or the severity of injuries, or if, and if the measure is known to favorably affect one or more risk factors that are known to contribute to accidents or injuries. As an example, all measures known to reduce driving speeds were regarded as potentially effective, because reduced speed is known to lead to fewer and less serious accidents.

Policy constraints on road safety policies

With the origin in this strategy several constraints for road safety policy are implemented by policy authorities. Thus, a constraint is anything that prevents you from

doing what you want or ought to do. It limits the actions you can take. Policy constraints include everything that sets limits to policies. Some constraints are very basic, others are in principle possible to modify. Most important constraints used in EU road safety policy are the following:

Lack of power: Formal authority to introduce road safety measures rests, broadly speaking, with three levels of government: International bodies, national governments, and local or regional governments. Lack of power denotes a situation in which the formal authority to introduce road safety measures rests with a higher level of government than the level at which a road safety programme is drafted. For example, national governments lack the power to introduce unilaterally road safety measures that is within the jurisdiction of international bodies, as is currently the case for vehicle safety standards in Europe.

Scarcity: If a road safety measure is cost-effective, which means that its benefits are greater than its costs, but introducing it would require additional expenditures on top of current expenditures, scarcity is said to obtain. It is important to note that scarcity in this sense exists only if a strictly optimal use of all road safety measures would require larger expenditures than the current use of road safety measures. If all cost-effective measures can be funded within current spending limits, there is no scarcity of resources. The rationale behind this definition of scarcity is that, by definition, society can afford what it currently spends on road safety. However, any additional expenditure would be at the expense of other public policy objectives.

Cost: Based on cost–benefit analysis, road safety measures can be categorized as cost-effective or inefficient. A cost-effective measure is one whose marginal benefits are greater than or equal to the marginal costs. An inefficient measure is one whose marginal benefits are smaller than the marginal costs. If one were to rely on cost–benefit analysis, inefficient measures would not be carried out, and would be considered as too costly. Cost, as a constraint on road safety policy, denotes a situation in which measures that could greatly improve road safety are too costly.

Social dilemmas: Cost–benefit analysis takes a societal perspective. This means that it includes all impacts of measures that are economically relevant, irrespective of whether

or not the impacts are subject to market transactions, and with no regard to how costs and benefits are distributed among various groups in society.

A social dilemma occurs whenever a measure, which is cost-effective from a societal point of view, fails to be so from the point of view of a particular group, like road users. Lowering speed limits may be a case in point. Part of the benefits of lowering speed limits are external from the road user's point of view, that is they are not experienced as a personal gain by the road user as such. This includes part of the cost of road accidents, and perhaps all benefits in terms of less noise and pollution. In an assessment of the private costs and benefits to road users, which would not include the external benefits, the result could well be different from that of a cost-benefit analysis taking a societal perspective.

Conflicting objectives: One of the aims of cost-benefit analysis is, ideally speaking, to help make trade-offs between conflicting policy objectives in a systematic manner. Some policy objectives, notably distributional objectives, are of a nature that does not permit trade-offs to be made within the framework of cost-benefit analysis. If, for example, policy makers want to help regional development by investing in remote and sparsely populated areas, it will often be difficult to justify this priority by means of a cost-benefit analysis. This, of course, does not mean that such policy priorities are wrong, simply that they cannot be fully addressed within the framework of cost-benefit analysis.

The EU road safety policy integration and the belonging harmonization of policies

The logic of assessing the importance of the constraints internal to road safety policy making is best explained by means the implementation of the EU road safety integration.

In inter-agency relationships, policy integration aims to incorporate policies from apparently disparate governmental institutions. This harmonization of policies often emerges in response to periods of policy drift or a highly disorganized policy regime, and a normative perspective of shared responsibility. This principle of intersectoral working form combines a range of transport policy interventions with social policy instruments.

Such alignment of effort in road safety management, for example, sees transport, health and police authorities collaborating closely to generate a coordinated response to rising road traffic deaths. It can equally manifest itself through the harmonization of terminology across sectors and data linkage. In addition, policy integration can combine legislative frameworks with public awareness campaigns. For instance, the enforcement of alcohol impairment laws can be combined with publicity. These public awareness campaigns have the potential to secure a public support for high visibility law enforcement activities, and a shared social norm for safety. This mobilization of road safety effort can result in increased levels of compliance with the law.

Conclusions

The evolution of road mortality has been uneven and with heterogeneous values of reduction in EU Member States. EU road safety policies include reduction in road fatalities by 50% in a decade.

The original territorial distribution of this target is uniform, as all the territories have to halve the number of fatalities regardless of their previous records.

In order to achieve this ambitious target, policy-making tasks must be re-defined, especially those related to road safety policy and road safety management system.

This re-definition or in different words, this paradigm change, must begin analyzing alternative strategies for road safety policy, which measures that can generate by itself national impacts, as the cost-benefit analyses shows.

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