Past and Current trends in Road safety governance and management
Generalities and French case

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GRETTIA-IFSTTAR
• Risk governance and regulation regime
  – Concepts
  – R4 in action
  – Public action analysis
• Types of public action
  – Public administration
  – New public management
  – New public governance
• Evolution of the french road safety policy
• Conclusion
Risk governance and regulation

• Road accident is a socio-technical risk that has to be governed and regulated by state authorities
• Road safety is a public good
• Implies a road safety policy and institutions design
• They take the form of
  – the public policy (set of laws and actions, government, policy makers)
  – the public administration (implementation, institutions, managers)
which varies according to countries and in time
• Risk governance refers to the institutions, rules conventions, processes and mechanisms by which decisions about risks are taken and implemented. Formulates risk management strategies.

• Risk-based regulation refers to regulatory decisions made by regulators through risk analysis to focus on the most serious ones (cost effectiveness).

• Behind the risk, there are the social and economic relationships between groups and sectors (power and inequity).
• The regulation can be characterized as a combination of the three components of risk control that are:

  – **collection of information** on risks for the monitoring of system status and action,

  – **setting goals and standards** through a process cost / efficiency, for example,

  – **individual and organisational behavior change** of users and managers by preventive (compliance) or repressive (deterrence) activities.
ISO 39001:2012

• Road Traffic Safety (RTS) management system – Requirements with guidance for use
• For all organisations that interact with the road traffic system to reduce deaths and serious injuries related to road traffic crashes which it can influence.

• Parallel with
  – ISO 14001:2004 Environmental management systems – Requirements with guidance for use

• Not with ISO 31010:2009 Risk assessment-Risk management techniques
Shaping by the nature of risk

Table 1: A summary of two perspectives of risk

<table>
<thead>
<tr>
<th>Risk and uncertainty</th>
<th>‘Scientific-technocratic’</th>
<th>‘Socio-political’ (or ‘social constructivist’/‘socio-psychological’)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Risk and uncertainty are separate concepts; Risk can be derived from empirical data, quantified, probabilistic analysis undertaken; Risk defined as ‘statistical expectation value of an unwanted event which may or may not occur’; Uncertainty is when there is insufficient data and knowledge of processes to carry out probabilistic analysis.</td>
<td>• Risk and uncertainty blur and merge in most real situations; • There are limits to the usefulness of quantitative techniques; • Qualitative judgements of risk and uncertainty are required; • Judgements of significance of risk based on a variety of social, psychological and political factors as well as scientific and technical;</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Subjective and objective risk</th>
<th>‘Scientific-technocratic’</th>
<th>‘Socio-political’ (or ‘social constructivist’/‘socio-psychological’)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Subjective and objective risks are separate; Objective risk exists ‘out there’ separate and distinct from that in people’s minds; Subjective or perceived risk is that in the minds of people and can be very different from objective reality</td>
<td>• Subjective and objective risk interact; • Objective risk can be affected by subjective risk; • Subjective and perceived risk, even when very different from objective risk, can be just as valid an input into deciding how to respond to risk.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Risk-based regulation and policy-making</th>
<th>‘Scientific-technocratic’</th>
<th>‘Socio-political’ (or ‘social constructivist’/‘socio-psychological’)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Key decisions made by governmental experts; Outside input limited mainly to scientific and technical experts; Stress on ‘utilitarian approach’ ie, quantitative techniques for risk assessment and economic cost-benefit analysis.</td>
<td>• Stress on qualitative techniques which recognise different kinds of knowledge and understandings of risk and value placed on responding to it; • Democratic decision processes, ie made by ministers with inclusion and dialogue with a wide range of differing actors; • Stress on a rights, societal concerns, and perceptions of risk.</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Areas of applicability</th>
<th>‘Scientific-technocratic’</th>
<th>‘Socio-political’ (or ‘social constructivist’/‘socio-psychological’)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low politicisation; High trust; High consensus; Relevant knowledge from clearly bounded scientific and technical arenas.</td>
<td>• High politicisation; • Low trust; • Low consensus; • Relevant knowledge derives from many areas and crosses many knowledge and professional boundaries.</td>
<td></td>
</tr>
</tbody>
</table>

Shaping by socio-economic pressures

- **Three shapers (Hood and al.)**
  - **Market and civil law process-failure pressures.** In a perfect liberal market, risk is factored through prices (product, contract, insurance)
  - **Opinion responsive pressures.** Democracy and media
  - **Interest-driven pressures.** Corporatism. Lobbies.

Context and Content of R4

- Types and levels of risk
- Public attitudes and preferences over risk
- Network of actors who produce and are affected by risk
- Policy settings
- Configuration of institutions engaged directly in regulation
- Regulation/Management tools
- Attitudes and representations of the regulators
Public action analysis

- Public policy consists of five elements interacting according to Lascoumes and Le Gales (2007)

Processes

• Mainly, the adoption of a road safety strategy, first at national, then regional and local levels, because the road safety policy becomes increasingly multi-level.

• The strategy is highlighted in the form of a strategic plan accompanied usually by a program of actions,
Structure of the system with Actors

- Policy makers (public policy making)
- Regulators and analysts (road risk)
- Public service managers
- Front-line practitioners
  - Wide range of professionals in road safety « services »
    - Engineering (Highway design)
    - Enforcement
    - Education (driving learning)
- Emergency
- Transportation
- Urban planning
- Health

their relationships are regulated by more or less formal institutions such committees/councils or commissions.
• on the State side we find the political and administrative sectorial elites with the leadership issue between them via the values they defend. Usually a ministry (transport, interior, equipment) with its technocratic body, or rather a department of the ministry plays a central role and is delegated to manage and coordinate interministerial action.

• The State tends to choose its interlocutors even create them. We must not overlook
  – the role of a state or a federal structure as the European Commission intervenes with a dilution phenomenon and multi-level governance,
  – but also the interaction with interest groups, the organization of their own interest of which can describe as low (conflict / collusion) to strong (corporatism and nepotism) through average (lobbying / expertise).

• The role of elites in the state can be reduced to the management and control of these networks of organizations that know each other, and are under the influence of large industrial groups (car and truck).
Representations

- **representations** relative to cognitive and normative framework of the strategy with a vision that can be eg Vision Zero, sustainable security or safe system approach.
- take the form of referentials or paradigms about
  - The general principles defining the goals,
  - The ways and means of action,
  - The forms of use of the instruments.
- the referential is the representation of the global / sectoral relationships which is built by a group of actors to be determined, qualified as **mediators** who may be professionals (engineers), administrative elites or politicians.
- The road safety policies can be seen as a means of regulating relations between the automotive industry and other sectors.
Vision zero or zero risk does not exist?

Vision Zero is based on the ethical imperative that (Tingvall and Haworth, 1999):

“It can never be ethically acceptable that people are killed or seriously injured when moving within the road system.”

Vision Zero strategic principles are:

- The traffic system has to adapt to take better account of the needs, mistakes and vulnerabilities of road users.
- The level of violence that the human body can tolerate without being killed or seriously injured forms the basic parameter in the design of the road transport system.
- Vehicle speed is the most important regulating factor for safe road traffic. It should be determined by the technical standards for roads and vehicles so as not to exceed the level of violence that the human body can tolerate.
Safe system as an international normative approach

Safe System – the new frontier

An unequivocal long term goal to eliminate death and serious injury with time-limited outcome and output targets driving and made possible by:

An exacting strategy for system-wide, multi-sectoral intervention based on known safety principles to address human limitations made possible by:

Strengthened, accountable institutional management

requiring best practice & continuous innovation across all elements of the road safety management system.

OECD (2008) Towards Zero: Ambitious road safety targets through a safe system approach

Tony Bliss
Jean Breen
WB GRSP
This is the background against which this road safety strategy is being developed and it requires us to approach the task in a more holistic way than previous strategies. In addition to looking at specific road safety levers and assessing road safety impacts, we need to ensure that what we propose progresses as many of the DaSTS goals and challenges as possible, and delivers outcomes that are acceptable to users across the whole of their travelling experiences. So, for example:

- we have rigorously assessed our proposed interventions and are clear that their overall impact is not detrimental in terms of greenhouse gas emissions;

- our road safety strategy needs to have an overall positive impact on public health, taking account of the health benefits of walking and cycling for adults and children, as well as the obvious public health benefit of avoiding large numbers of premature deaths and serious injuries;

- road safety measures must pass the test of better regulation, and must be proportionate in terms of their economic impacts on different sectors of society.
Institutions

• **Institutions** are used to stabilize the modes of cooperation among actors through the game rules and representations of mutual issues. These rules, procedures, standards will govern interactions and enable collective action.

• They can be formal as parliamentary standing committees (legislative power), ministerial cabinets (executive power) on issues of safety and transportation, or inter-ministerial committees on road safety.

• In the current climate of weakness and lack of legitimacy of public policies, there has been a movement towards governance in a pluralistic society torn between interest groups with a versatile opinion, and to autonomous players who withdrew their power to regulators.
Types of Public action

• Public administration
  – the dominance of the ‘rule of law’;
  – a focus on administering set rules and guidelines;
  – a central role for the bureaucracy in policy making and implementation;
  – the ‘politics – administration’ split within public organizations
  – policy making and implementation are vertically integrated within government (hierarchy and silo)
  – Existence of policy network (interest groups, politicians, administrators)
Evidence-based policy
Expertise and research

interpretation of evidence as “the available body of facts or information indicating whether a belief or proposition is true or valid”, a definition drawn originally from the Oxford English Dictionary. Davoudi (2006, p. 20) infers from this that “facts or information are not themselves evidence, they become evidence when they are used in conjunction with other facts to prove or disprove a proposition… [it] is not limited to research findings and includes multiples sources of different forms of formal and informal, expert and experiential, and systematic and tacit knowledge.” The culmination of filtering through a series of lenses produces research-based evidence, although other forms of evidence (both knowledge and information) would also be used in planning, even in EBP. In other words, information and knowledge both have a place in broader planning practice.

Evaluation of public policies?

- Effectiveness
- Efficiency
- Acceptability

- Rune Elvik, Truls Vaa The handbook of road safety measures
- World report on injury prevention (WHO)
- Sharing road safety (CMF), OECD
But knowledge required for effective services is much broader than simply “what works”

- **Know-about (problems)**: e.g. the nature and formation of social problems.
- **Know-why (requirements of action)**: relationship between values & policy/practice.
- **Know-how (to put into practice)**: e.g. pragmatic knowledge about implementation.
- **Know-who (to involve)**: e.g. building alliances for action.

Need research evidence and other knowledge to address these issues
• New public management
  – making and implementation are at least partially articulated and disengaged
  – implementation is through a collection of independent service units, ideally in competition. Contractualization.
  – Emphasis on output control (evaluation/objectives/indicators)
  – Cost reduction

The management system of road safety

Such a system relies on a lead agency which has enough power to control it

• A first set of ten criteria noted on a scale (yes, part, being, not) is related to the **focus on results** at the system level as a whole
  – the existence of statistics and targets,
  – sharing of responsibilities between agencies and other stakeholders,
  – application of standards by risk category (speed, alcohol, protection, fatigue)

• and is decomposed by instruments for infrastructure (evaluation, audit, inspection, blackspots).
A second set is on three **areas of intervention** (safety standards and types of rules, required levels of performance and compliance regimes).

A third set applies to the six **functions**. Each function is disaggregated into coordination sub-functions: horizontal, vertical, with the private sector and non-governmental organizations, and with the Parliament.

A fourth set is for the role of the agency in charge of road safety in relation to the seven functions.
• Digital Era Governance
  – Use of Internet and social network
  – Connecting Information systems
  – Users’ needs and mutualisation
• New public governance
  – predicated upon the existence of a plural state, where multiple inter-dependent actors contribute to the delivery of public services, and a pluralist state where multiple processes inform the policy making system
  – governance network as the horizontal organisational form (leadership, cooperation, coproduction...)
  – managerial innovation in network management (concepts, tools, structures)
  – adapted to territory division
<table>
<thead>
<tr>
<th>Paradigm/key elements</th>
<th>Theoretical roots</th>
<th>Nature of the state</th>
<th>Focus</th>
<th>Emphasis</th>
<th>Relationship to external (non-public) organizational partners</th>
<th>Governance mechanism</th>
<th>Value base</th>
</tr>
</thead>
<tbody>
<tr>
<td>Public Administration</td>
<td>Political science and public policy</td>
<td>Unitary</td>
<td>The policy system</td>
<td>Policy implementation</td>
<td>Potential elements of the policy system</td>
<td>Hierarchy</td>
<td>Public sector ethos</td>
</tr>
<tr>
<td>New Public Management</td>
<td>Rational/public choice theory and management studies</td>
<td>Disaggregated</td>
<td>Intra-organizational management</td>
<td>Service inputs and outputs</td>
<td>Independent contractors within a competitive market-place</td>
<td>The market and classical or neo-classical contracts</td>
<td>Efficacy of competition and the market-place</td>
</tr>
<tr>
<td>New Public Governance</td>
<td>Organizational sociology and network theory</td>
<td>Plural and pluralist</td>
<td>Inter-organizational governance</td>
<td>Service processes and outcomes</td>
<td>Preferred suppliers, and often inter-dependent agents within ongoing relationships</td>
<td>Trust or relational contracts</td>
<td>Neo-corporatist</td>
</tr>
</tbody>
</table>

Table 1. Two dominant perspectives in public administration

<table>
<thead>
<tr>
<th></th>
<th>New Public Management</th>
<th>Governance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Focus</td>
<td>Organizational and institutional changes and adaptations within the public sector (intra organizational focus)</td>
<td>Changing and adaptations in the relations between governments and other actors (inter organizational focus)</td>
</tr>
<tr>
<td>Objectives</td>
<td>Improving effectiveness and efficiency of public service delivery and public organizations</td>
<td>Improving inter-organizational coordination and quality of decision-making</td>
</tr>
<tr>
<td>Core ideas/management techniques</td>
<td>Using business instruments (modern management techniques, market mechanisms, performance indicators, consumer boards) to improve service delivery</td>
<td>Using network management: activating actors, organizing research and information gathering (joint fact finding), exploring content, arranging, process rules, etc.</td>
</tr>
<tr>
<td>Politics</td>
<td>Elected officials set goals and implementation is achieved by independent agencies or market mechanisms on the basis of clear performance indicators</td>
<td>Goals are developed during interaction and decision-making processes, elected officeholders are part of the process or meta-governors</td>
</tr>
<tr>
<td>complexity</td>
<td>Modern society is complex but we need clear goals and flexible implementation for that. Keep away from the complex interactions with society. If necessary use consumer boards or market incentives to govern implementing units</td>
<td>Modern society is complex and requires interdependence, citizens do not take the decisions of public actors at face value. Taking part in complexity by interacting with actors in society is unavoidable and/or necessary to reach satisfactory outcomes</td>
</tr>
</tbody>
</table>

Evolution of the french road safety policy

• Public action on road safety thus appears to be more sensitive to the successive ways in which the State has been modernised than to public definitions of the problem of road safety

• Three phases of road safety.
  – Etatization 1960-1981 (right government)
  – Participation of civil society 1981-2002 (left government)
  – Recentralization of public action 2002- (right government)
Etatization 1960-1981

- At start a policy network with the **Insurance sector** as with an association « **Prévention routière** » the main actor (local governance)
- **Minsitère des travaux publics et des transports** in charge of statistics (Police)
- **Organisme national de sécurité routière** an association created in 1962 by the public sector (justice, health, ... on board of directors) without the car-producers. Increases the capacity in scientific expertise
- The car manufacturers Renault+Peugeot created in 1969 a joint research laboratory LAB
- **Rationalising budgetary choices** (RCB) by importation of the American PPBS model (Program Planning and Budgeting System) gave rise, in the early 1970s, to the **first official public road safety policy**
• in 1972 introduction of the *Interministerial Delegate for road safety (DISR)* who is the pivot of the national road safety policy in France. He provides the secretariat of the *CISR, interministerial committee for road safety*, headed by the Prime Minister, and created the same year.

• Development and implementation of the policy through national laws (speed limit, seat belt, alcohol and driving) monitored by ONSER by means of driver behavioral surveys
Participation of civil society 1981-2002

- The DISR chairs the French lead agency for road safety: Direction de la sécurité et de la circulation routière DSCR (department of traffic and road safety), created in 1982 within the Ministry of Public Works and Transport.

- The delegate relies on the National Interministerial Observatory of Road Safety (ONISR) for all accident statistics and the use of target has been introduced since 1982.

- In the context of decentralisation, road safety policy is being restructured around the need for society to participate in defining and implementing public action with the necessary introduction of a "local road safety policy" (Ville plus sûre, quartiers sans accidents (safer and accident-free cities) traffic calming on urban network).

- The decentralization process knew a new development by the law voted in 2004 which authorized the transfer of 17000 km of national roads to départements (counties).
• Policy-makers are now relying on partnership and cooperation between a wider range of actors: motivated government employees, community activists and elected representatives. They were mobilised by means of contracts (Objective -10% for local communities) and incentives (REAGIR program), of which the PDASR (1987) became the main procedural instrument.

• the State apparatus is largely reduced to a function of "animating" public action in road safety oriented towards prevention. It is less interested in doing than in getting things done.

• Only the victims' associations, which came into being during this period, came out clearly in favour of a tougher repressive policy (enforcement).

• The growing importance of the European level in public action on road safety is reflected in the 1997-2002 reform plan entitled "Promoting road safety in the European Union". Benchmarking and importation of foreign solutions.
Centralisation and governance 2002-

- The road safety policy evaluation group in June 2001, calls for the rapid adoption of measures for the **automatic enforcement of speeding offences CSA** (innovative information and communication technologies) or **speed camera program (SCP)**
- The head of state Chirac puts the problem of road safety back on the political agenda and the CSA can be seen as an innovative instrument for reaffirming the State's leadership in road safety policy
- In 2008, the lead agency changes name delegation to traffic and road safety (DSCR). Since 2012, this delegation has been placed under the authority of the ministry of Interior. The delegation consists of three sub-departments: interministerial action, education, transversal affairs, and two services: communication, control. Competences in technical vehicle regulations, infrastructure and security road equipment are under the responsibility of the ministry of Ecology, Sustainable Development and Energy.
- New Public Management does not play a decisive role in the design and implementation of road safety policy in France
• The Delegation provides also the secretariat of the **National Road Safety Council** (CNSR), created by a decree in 2001 and whose members include representatives of Parliament, ministries, local authorities, transport related businesses and NGOs (political commitment).

• The CNSR recommends actions, changes in rules, and asks for studies and evaluations, while the Delegation is in charge of the preparation of policy orientations which are discussed by the **groupe interministériel permanent de la sécurité routière** composed of the administrators of departments of different ministries concerned by road safety. Then an **Inter-Ministerial Road Safety Committee (CISR)**, placed under the Prime Minister responsibility, with a delegation to the Minister of Interior, is organized once or twice a year to adopt policy orientations.

• Road safety strategy is defined through a transversal policy document (DPT) under the signature of the Minister of the Interior (2014).

• This document is supplemented by the **Annual Performance Project (PAP)** of the **Program 207 Road safety and education**, under the signature of the **Interministerial Delegate**. For each program, ministry must submit some documents to Parliament: the PAP and the annual **performance report (RAP)**.

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**Box 2: Objectives for a Road Safety Policy**

**REDUCING THE ROAD ACCIDENTALITY**

**OBJECTIVE 1**: Mobilizing all of society on road safety to reduce the number of accidents and road deaths

**IMPROVING DRIVER TRAINING**

**OBJECTIVE 2**: Improving driving license delivery as part of the development of road safety education throughout life

**FIGHTING FAILURE TO COMPLY THE HIGHWAY CODE**

**OBJECTIVE 3**: Ensuring the effectiveness of automated control system in terms of compliance with the rules of the Highway Code

**OBJECTIVE 4**: Enhancing the effectiveness in the fight against road accidents
## Box 1: List of Interministerial Delegates

<table>
<thead>
<tr>
<th>Name</th>
<th>Period</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Christian Gérondeau</td>
<td>1972-1982</td>
<td>(civil engineer)</td>
</tr>
<tr>
<td>Pierre Mayet</td>
<td>1982-1985</td>
<td>(civil engineer)</td>
</tr>
<tr>
<td>Pierre Denizet</td>
<td>1985-1987</td>
<td>(administrator)</td>
</tr>
<tr>
<td>Pierre Graff</td>
<td>1987-1990</td>
<td>(civil engineer)</td>
</tr>
<tr>
<td>Jean-Michel Bérard</td>
<td>1990-1995</td>
<td>(Prefect)</td>
</tr>
<tr>
<td>Alain Bodon</td>
<td>1995-1998</td>
<td>(administrator)</td>
</tr>
<tr>
<td>Isabelle Massin</td>
<td>1998-2003</td>
<td>(Urbanist)</td>
</tr>
<tr>
<td>Remy Heitz</td>
<td>2003-2006</td>
<td>(Magistrate)</td>
</tr>
<tr>
<td>Cécile Petit</td>
<td>2006-2008</td>
<td>(Magistrate)</td>
</tr>
<tr>
<td>Michèle Merli</td>
<td>2008-2011</td>
<td>(Prefect)</td>
</tr>
<tr>
<td>Jean-Luc Névache</td>
<td>2011-2012</td>
<td>(Prefect)</td>
</tr>
<tr>
<td>Frédéric Péchenard</td>
<td>2012-2013</td>
<td>(Police Directorate)</td>
</tr>
<tr>
<td>Jean-Robert Lopez</td>
<td>2014-2015</td>
<td>(Prefect)</td>
</tr>
<tr>
<td>Emmanuel Barbe</td>
<td>2015-2020</td>
<td>(Magistrate)</td>
</tr>
<tr>
<td>Marie Gautier-Melleray</td>
<td>2020-2022</td>
<td>(Maitre des requetes)</td>
</tr>
<tr>
<td>Florence Guillaume</td>
<td>2022-</td>
<td>(General of the gendarmerie)</td>
</tr>
</tbody>
</table>
Bibliography

• Delorme Robert et Sylvain Lassarre (2009), Les régimes français et britannique de régulation du risque routier, La vitesse d’abord, Les collections de l’INRETS n°57, pp.201-232.
Figure 11: Multi-sectoral coordination arrangements for road safety in Sweden (2008)
Figure 4: Aggregate structure of the Lead Directorate in the Department for Transport in Great Britain (2005)

Roads and Vehicle Safety and Standards Directorate, Department for Transport (DfT)

Lead Directorate responsible for road safety results, interventions and implementation

Agencies within the Department

- Highways Agency
- Vehicle Certification Agency
- Vehicle Inspection Agency
- Driver and Vehicle Licensing Agency
- Driving Standards Agency
- Vehicle and Operator Services Agency

Consultation and coordination bodies

- Road Safety Advisory Panel—national
- High Level Group on Road Safety—European Union
- European Conference of Ministers of Transport—43 European countries

Local authorities—local road safety

Association of Chief Police Officers—policing, crash investigation

Treasury—finance and hypothecation

Home Office, Scottish and Welsh Assembly Govts—policing, courts

Dept of Education and Skills—education

Dept of Health—trauma care, data

Health and Safety Executive—work-related road safety

European New Car Assessment and Road Assessment Programmes—vehicle fleet and road network safety monitoring

European Union, UN ECE—standards
Conclusion

• Normative models from international institutions (World Bank, WHO, ISO) about risk governance and regulation
• Each country finds its own way through evolution from classic public administration
• Past economic rationality Cost/benefits and technocratic stance no more dominant
• Replace by New Public Management (services delivery and performance indicators)
• Participative governance and integrative policy on the way for sustainable development