The intractable citizen and the single-minded risk expert

Mechanisms causing the Risk Regulation Reflex pointed out in the Dutch Risk and Responsibility programme

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Abstract

Safety regulations are too often disproportional in the sense that their costs outweigh the benefits. Although this is well known, years of trying to reduce safety related regulatory pressure has not resulted in much success. Two important causes for this have not received much attention up to now. One of these is a faulty perception of how the general public regards risk. We argue that the intractable citizen’s behaviour needs better understanding. The second cause is the single-mindedness of risk experts which calls for specific instruments to be harnessed.

I. Introduction

Western societies find themselves increasingly confronted with an expansion of risk and safety regulations, in the sense that the relative costs of safety rules tend to outweigh their benefits. Think, for example, of the compulsory Fire Exit signs in certain buildings. Studies have shown time and time again that these signs are fundamentally redundant: people unfamiliar with their surroundings will try and retrace the path they used to enter the building (regardless of the obstacles they encounter)³. And even if people would look out for these signs they wouldn’t be able to find them, because they’re made invisible by the smoke from the fire.⁴ In terms of safety, the obligation to put up such signs is therefore pointless, but

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⁴ Some countries have altered their regulation to have the exit signs at knee height. This does however not change, as experiments show, the non-use of these signs in emergency situations.
nonetheless it is still enforced in all European countries.

The escalation of regulatory pressure has been detailed extensively in the scientific literature\(^5\), but in practice governments and administrators are finding it difficult to repeal or rewrite existing legislation even if it is obviously superfluous. As Aaron Wildavsky already put it in his famous 1988 book: the decision for regulating any risk encountered by anticipatory measures is made consistently, although this is not beneficial to society as a whole.\(^6\)

In this article we set out to determine why risk regulation is often introduced and why it appears to be so difficult for decision-makers to resist calls for more. Building on the work by the UK’s Better Regulation Commission and Risk and Regulatory Advisory Commission (see the article by Adam Burgess and Donald Macrae in this issue) the analysis by the Dutch Interior Ministry’s Risk and Responsibility programme (R&R programme) suggests the following pattern: society becomes aware of a risk and is perceived to want something done about it, risk experts advise certain measures after which politicians feel a need to decide to implement these without thoughtful consideration of other factors which should be involved in the decision-making process (such as budgetary and proportionality concerns). In the Dutch R&R programme (see the article by Jan van Tol in this issue) this mechanism is called the Risk Regulation Reflex.

The analysis of the discussion during seven departmental workshops on improving the proportionality of risk regulation, organized by the R&R programme in the second half of 2011, suggested that two mechanisms are responsible in particular for the increase in risk regulation:

- The misunderstanding of what Dutch citizens actually think of risk regulation (a surprising contrast between their risk acceptance and their risk perception)
- The single-mindedness of risk experts who value their ‘own’ risks more than the common good.\(^7\)

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\(^7\) Reports from these workshops are available upon request. They have been published (in Dutch) as part of the R&R programme and have been reviewed by the participants.
In this article we attempt to shed new light on the roots of these causes and the necessity of addressing them. We will first expand on the relation between (de)regulation and safety, as well as the problems with getting a grip on the rise of safety regulation. Then we will address the two main contributing factors to new risk regulation: the intractable citizen and the single-minded risk professional.

II. The connection between safety and regulation

Analyses of risk and safety regulation should always consider the fact that we are now safer than ever before. There is no better measure for safety than life expectancy and in Western Europe we now live almost twice as long as we did two hundred years ago, and our average life expectancy is still increasing, albeit marginally. The curve in increased life expectancy has of course flattened out in recent decades, which is not entirely surprising. Every improvement curve flattens out at a certain point. Consequently, anyone who wants to achieve anything in the ‘tail’ of the curve needs to be very cautious about making substantial investments, as they can easily be disproportionate.

To a certain extent this statistic is deceptive. To consider the average growth in life expectancy is to ignore the significant differences that exist between higher and lower income groups. In a classic study published in 1997, Mackenbach was the first to examine in detail the health effects of social stratification. Recent figures from the Dutch Bureau of Statistics (‘CBS’) confirm Mackenbach’s findings: life expectancy is strongly related to a person’s level of education and subsequently his income. Life expectancy actually increases up to seven years for people with a higher education, and the difference in the number of years the two groups experience a good health is as much as 16 to 19 years.

A safer society (i.e. a society with a higher average life expectancy) can consequently be reached by boosting prosperity in lower income groups. In contrast, as for example Graham argues in his classic testimony for the US congress, a higher degree of regulatory pressure

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8 Until now, it seems that Moore’s law, which says that computers’ performance doubles every other year, seems to be an exception to this rule.
reduces prosperity, especially in the lower income groups.\textsuperscript{11} This means that Western societies who want to achieve a higher average level of safety, first and foremost need to find a way to limit and decrease whenever possible the burden of regulation.

A study of the American petrochemical industry by Frederick Wolfe demonstrates a comparable clear relationship between the safety and prosperity of companies.\textsuperscript{12} It shows that operational profit is a better indicator of safety in the petrochemical industry than the level of investment in safety imposed by the (U.S.) government. With a bit of common sense one can see an apparently logical reason for this mechanism: in a profitable business the pressure to maintain production at all costs would be less than in one that is on the point of collapse. Also, a healthy business wants to ensure a good reputation. Safety inspectors make the same connection, but then in reverse: a business that looks impoverished and dirty is worth inspecting thoroughly.

Increasing regulatory pressure on behalf of safety is therefore not just a symptom of an ill-considered response to risks but also, because of its reducing prosperity and increasing risky behaviour, a source of danger in and of itself.

There should be no misunderstanding about the fact that the causal relationship presented here only applies to the tail of the safety curve, i.e. above a certain basic level of regulation and investments in safety. Circumstances of two hundred years ago are obviously well below this basic level. The major industrial accidents of the nineteen seventies indicate that then at least the basic level for the petrochemical industry had not yet been reached, but we have come a long way since then.

\section*{III. The conflicting reality of ever more safety regulation}

The idea that a decrease in regulatory pressure has a positive economic effect (and doesn’t decrease safety and may even enhance it) has been the driving force behind many Dutch


\textsuperscript{12} Frederick Wolf, "Resource Availability, Commitment and Environmental Reliability & Safety: A Study of Petroleum Refineries", 13 (1) \textit{Journal of Contingencies and Crisis Management} (2005), pp. 2 \textit{et sqq}. 
governmental policies of the last decade. The problem is that repealing safety legislation or decreasing inspections proves very difficult in practice.

A recent report by the Dutch governmental Scientific Research and Documentation Centre (‘WODC’) clearly states, “Since the nineteen eighties the Dutch Government has pursued a policy directed at reducing the degree of regulation. Attention was initially focused mainly on consolidating the supply side of the economy; later, greater emphasis was placed on the quality of legislation. Despite these efforts the body of regulations in the Netherlands has increased by about 2% annually over the last 30 years. In recent years this growth appeared to have come to an end, but in 2008 the production of legislation reverted to its previous level.”

One of the committees in the Netherlands which addressed this issue is exemplary of the calls to put a halt to ever more regulation. The Stevens commission, in its final report, wrote: “It is an illusion that rules can prevent all problems and risks. More rules in response to incidents lead in practice to an increase in rule rigidity, which has a counterproductive effect”.

This example is such an illustrating one because the committee itself, somewhat despairing it seems, gives as its twelfth and last recommendation: “Put the Stevens committee recommendations into practice.” Explaining that “in its reports preceding the final report, the commission has made many recommendations to reduce regulatory pressure. These have not all been implemented”.

Concerns about the growing number of rules and the private sector’s problems with administrative costs are of course not exclusive to the Netherlands: most Western countries have been struggling with this issue for some time. None appear to be able to end it.

In for example the UK where there is a history of looking into the costs and benefits of regulation (see article by Burgess and Macrae in this issue) the National Accounting Office concluded last year on the achievements of the Better Regulation Executive’s since its creation in 2005, ‘they are not yet in a position to achieve value for money in their management of regulation as gaps remain in two important areas: understanding the impact

14 Ondernemersklankbord Regeldruk, Regels op maat, eindrapport van de commissie Stevens (Fitting regulations, final report by the Stevens committee) (Den Haag: Ministerie van Economische Zaken 2007).
on businesses. [...] and estimating the costs and benefits of individual regulations reviewing impacts once regulation is implemented.\(^{15}\)

We will now turn that what we believe are the underlying causes of these problems. If the conclusion should be that policy efforts of thirty years have not had enough effect, the question should be what are the deeper causes of this?\(^{16}\)

**IV. The Intractable Citizen**

Frequently, regulation is initiated by what is perceived as a public outcry after people discover the size and shape of a new risk. This public outcry is thought to be reflected in increased media attention and opinion polls. Unfortunately upon careful consideration, these channels provide us with little information on what citizens actually expect from government.

Research on risk perception has provided us with important insights into the factors shaping risk perception\(^{17}\), but so far tells us little about how decision-makers should interpret and utilize this information. We argue that we should not focus on risk perception but rather turn our attention to risk acceptance: i.e. the level of risk people are willing to tolerate\(^{18}\).

When citizens are asked, either in opinion polls or scientific studies, how they value a specific risk and what they feel should (or shouldn’t) be done about it, the common response is a request for higher safety standards, tighter regulation, hefty fines for wrongdoers and absence of willingness to contribute to that themselves. They will in fact applaud any measure which promises to increase safety, since, of course, no one prefers danger to safety.


\(^{16}\) Here one may ask the systematic question whether, without this reduction policy, there would not be many more regulations. There might very well be, but even so, the actual increase in the number of regulations can hardly be considered a success.


This however only shows one side of the citizens believes about the regulation of safety. The other side is usually hidden by the fact that politicians, journalists and researchers don’t ask any follow-up questions, so that the impression remains that citizens only want more safety. Some research\(^{19}\) results actually paint a different picture.

In a 2009\(^{20}\) study of the Amsterdam metro we for example provided 600 passengers with information on tunnel safety in face-to-face interviews. We explained to them that the chances of surviving a fire are almost nil in the metro tunnel. 80% of the respondents believed they should have been informed about this risk by the Amsterdam Transport Authority (GVB), because they felt they received ‘inadequate information’. We then offered them information which suggested that the metro is actually one of the safest forms of transport, but still 75% felt that additional investments were necessary to improve safety. No one, however, was prepared to pay an extra contribution in the form of an increase in the ticket price. In conclusion we asked the respondents to put themselves in the shoes of administrators and consider the cost of safety measures to remedy this sure chance of dying (about half a billion euros). 50% of the respondents now stated they would as administrators not spend that much money on safety measures in the metro.

In several studies since then we have seen this, what could be called intractable behaviour, been repeated. Intractable means here: not easily governed, managed or directed. We typically first asked questions similar to traditional opinion polls, for instance whether safety standards should be adhered to more strictly (the answers were mostly that increased measures were necessary). Subsequently we asked respondents whether they were willing to pay for these extra requirements (for example by a tax increase). Most people weren’t. We then asked the respondents to put themselves in the shoes of decision-makers and consider extra safety investments. ‘Suddenly’ they became aware of the diverging and competing values one had to consider and realized that money was better spent elsewhere: they ignored their previous answers and advised not to invest in what they originally asked for (See, for a discussion on risk regulation and values Michel van Eeten (this issue). The bottom line being that people seem to be able to make a difference between their own risk perception and what risks should be accepted reasoning from a rational point of view.

\(^{19}\) As is supported, of course, by other research. Think for example of Andrew Evans, “Railway risks, safety values and safety costs”, 158 Transport, part of the Proceedings of the Institution of Civil Engineers (2005).

This kind of not very well understood intractable behaviour can be also witnessed in other settings. For example, the Blackett Review of High Impact Low Probability Risks\(^\text{21}\) claims that ‘the public has a much stronger reaction to a group of deaths resulting from a single event than for a similar number of people dying in a number of unrelated events’. To support this claim the Blackett Review provides an example of the UK M40 Minibus Crash in 1993 in which 13 died (12 children), since the incident ‘eventually lead to calls for compulsory seatbelts in minibuses and coaches’, whereas the ‘much larger annual number of road deaths’ didn’t. Once again the ‘public’ is blamed for irrational risk regulation after an incident with only circumstantial evidence. We believe, however, that the public reaction is not correctly understood. Research conducted by TNS NIPO as part of the Dutch R&R programme shows that people feel victims of small accidents or large disasters should be treated equally. Only if the government is explicitly to blame, in the case of, for example, a dike breach, the government should compensate victims above the level of the regular social security\(^\text{22}\).

Furthermore, events in the village of Son and Breugel\(^\text{23}\) illustrate the fact that risk policy based upon the reasonable side of the intractable citizens can be successful even when dealing with highly dangerous risks. Son and Breugel has had Europe’s largest pesticides storage facility since the seventies of the last century. Originating from the wish of the national government to centralize the storage of such toxic substances, Son en Breugel was designated as the ideal location. Citizens and the local council often expressed concerns about it, but the local, provincial and national administrators only gave as a standard answer that there was no significant risk and people should consequently not be concerned. Eventually the municipality realised this strategy wasn’t working so it changed its position in 2002. The mayor explained people that the smoke from the facility, should it catch on fire, would be deadly and advised citizens to flee the area if there ever was a fire, and apply common sense when dealing with smoke. Subsequently, the citizens came to terms with the risk and their concerns subsided.


\(^{22}\) This research was conducted by having three online communities with twenty participants of a week each in which principles for good governing of risk were discussed. Elmara Bemer, Diane Fase and Sibolt Mulder, *Fase 3: oplossingsrichtingen en principes: bevindingen derde RIVeRaad burgercommunity* (TNS NIPO: Amsterdam 2012).

\(^{23}\) The story of Son en Breugel is based on the involvement of one of the authors with implementing this communication policy since 2002.
Even after a large fire in January 2011 in a chemical storage facility in Moerdijk which was caused a heated debate in the media and Parliament no public reaction was heard of in Son en Breugel.

We therefore postulate that the modern intractable citizen has two faces. The first pictures a citizen with NIMBY (not-in-my-backyard) syndrome\(^{24}\), i.e. a citizen who, when asked what he wants always chooses what is best for himself. The second, however, illustrates that citizens can understand and even require the government to manage their own self-interest. Daring to appeal to citizen’s ‘second face’ requires what Paul Frissen\(^{25}\) has called ‘aristocratic politics’, instead of a reliance on weekly opinion polls and surveys who only ask classical questions on risk perception. Aristocratic politics is the opposite of short-sighted populism based on traditional polling and calls for public administrators who decide based upon considerations of what favours the public interest and dare to communicate that.

V. The single-mindedness of risk experts

The growth in size and scope of modern risk regulation is not only influenced by misguided ideas about the public’s wants and needs, but is equally controlled by the environment in which policy initiatives are formulated and developed. Safety regulation is the sum of the activities of a large number of specialised policy fields. In governmental departments, universities and consulting firms there are usually only a limited number of people working on a single safety topic, e.g. food security, marine pollution or construction safety. These experts are genuinely involved with their ‘safety postage stamp’, i.e. the small part of the broad area of safety covered by their expertise. They value their safety domain above other risks and will use every opportunity to have their ‘pet risk’ better regulated. Experts and policy makers therefore generally find it hard to keep a proportionate perspective on their own domain and can thus be considered as single-minded.

Taking a more cynical bureau-political point of view, the world of safety regulation is one in which policy departments compete for portions of the national budget, relative influence vis-


\(^{25}\) Paul H.A. Frissen, Gevaar verplicht: Over de noodzaak van aristocratische politiek (Amsterdam: Van Gennep 2009).
à-vis other agencies and an increase in manpower. It is not at all in a policy department’s bureau-political interest to limit the need for more regulation, or to think of the relativeness of this urgency, since that would result in fewer people who can keep their jobs and diminishing power in competitive ministries. Ordering departments to reduce policy, and to a certain extent reduce their own reasons for being there, is a bit like expecting a turkey to organise its own Christmas Dinner.

The implicit acknowledgement of the inevitability of this process has led to deregulation programmes promoted by external (cabinet) pressure, for example by means of heavy-weight temporary programmes and committees who function outside the traditional departmental hierarchy. A Dutch example is the Interdepartmental Project Direction of Administrative Costs. Right now the most tenacious temporary programme is the Advisory Board on Administrative Costs (Actal). Other committees of recent years have been the Simplification of Permits Taskforce, the Business Soundboard on Pressure of Regulation and the Committee for the Pressure of Regulation on Businesses, chaired by Bernard Wientjes (chairman of the Dutch employer’s federation).

Where committees and various programmes push towards reducing the pressure of regulation and thus threaten the existence of policy departments, opposite forces arise. A major ‘counter instrument’ is what the Nobel laureate Herbert A. Simon called ‘information asymmetry’: knowledge is required in order to determine what rules are disproportionate and can therefore be repealed. This knowledge is usually only available by the risk professionals of policy departments and their external advisors. These experts are genuinely involved with their ‘safety postage stamp’, i.e. the small part of the broad area of safety covered by their

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27 See Interdepartementale Projectdirectie Administratieve Lasten, Meten is weten. Handleiding voor het definiëren en meten van administratieve lasten voor het bedrijfsleven (‘To measure is to know. Guide to defining and measuring administrative costs for the private sector’), (Den Haag: Rijksoverheid 2003).
28 Actal, Onderzoeksrapport naar de behoeften van gebruikers van integrale analyses voor beleid en wetgeving (‘Research report on the needs of users of integral analyses for policy and legislation’), (Den Haag: Actal 2010).
30 See Ondernemersklankbord Regeldruk, Regels op maat, eindrapport van de commissie Stevens (Fitting regulations, final report by the Stevens committee) (Den Haag: Ministerie van Economische Zaken 2007).
31 Herbert A. Simon, Models of Bounded Rationality: Empirically grounded economic reason (Boston: MIT Press (1982)).
expertise. They value their safety domain above other risks and will use every opportunity to have their ‘pet risk’ better regulated. It is precisely for this reason that external committees are not very successful in making clear what rules do and do not contribute to safety in a cost effective manner. The WODC concludes, for example, in a meta study, that a UK attempt for cancellation of rules by a special, permanent ‘Law Commission’ is in ‘quantitative terms not very effective’. 32

The shift in focus from ‘new public management’ to ‘legislation quality’, can from this point of view, be called a ‘policy takeover’ by risk professionals of the original effort to create a more efficient government by implementing market-oriented processes. A focus on ‘legislation quality’ sounds good in theory, but in no way guarantees an actual decline in the number of rules and regulations. 33

For the single-minded risk professional incidents give a golden opportunity to make politicians, afraid as they are of public unrest, decide upon tougher regulation which supposedly could have prevented the incident that has happened. Risk experts really believe, and policy makers are made to believe, that an incident is proof that regulation should be tightened. In the Netherlands a famous example is the renowned industrial safety expert Ale who carries a picture of the disastrous results of a BLEVE 34 on him, to show to media in case of an industrial incident he is asked to comment on. He has already done so twice.

A classic Dutch example of such a disproportional response to incidents is the update of the ‘occupancy permits’ for cafés following the Volendam Café Fire (2001). In the Café Fire 14 people died and more than 180 youths were hospitalised, several becoming seriously scarred for life. After the fire a lot of governmental attention focused on the permit issue, although this, remarkably, had little to do with the actual cause of the fire. If the Café Fire was attributed to governmental failure, it was an enforcement issue (‘Why had a disregard of regulation the municipality had known about for years been allowed to continue?’). The interesting thing, however, that both the national government and the municipalities concentrated in particular on the permit issue, in the so-called ‘updating occupancy permits’

33 The title of a contribution of Sarah Veale of the UK Trades Union Congress in this journal ‘better regulation yes – de-regulation no’ is a case in point. (EJRR 2|2011, p 263-265).
34 A BLEVE is a explosion of a tank contained a liquefied fuel gas.
operation. The possession of a permit, however, is an entirely different issue from the use of a highly inflammable and thus already in the year 2000 illegal ceiling decoration, which was in fact the cause of the Café fire. The fire was, however, seen as a golden opportunity for the Dutch Fire Services to make the case for more manpower and equipment. When the ‘updating occupancy permits’ operation was more or less complete after 5 years (at the cost of permit applicants), it was discovered that the government had no money to finance the required inspections and enforcement actions. The occupancy permit was subsequently abolished. A 2006 analysis shows that the government accepted 24 recommendations after the Café fire and that only half of these were implemented, but only marginally or not at all.³⁵

Another highly publicized Dutch case involves an outbreak of Legionnaires’ disease in Boven-Karspel. The outbreak killed 32 and infected at least 206 others in 1999. After the outbreak the risk experts came up with regulation that required municipalities, sports facilities and fitness centres to perform risk analyses of their hot water systems. If necessary, installations would have to be modified to fit the required newly formulated standards. Every facility also had to have a risk management plan. Estimates of the costs put on businesses and organisations vary from one billion to tens of billions of euros.³⁶ The benefits of these very costly measures were however limited for a number of reasons. First of all, the number of (registered) cases of Legionnaires’ disease in the Netherlands is small anyway, i.e. several hundred, of which a few dozen are fatal.³⁷ Moreover, over half of all infections are most likely acquired abroad. Rough calculations estimate that the new requirements put a cost of about one million euro on saving one Quality Adjusted Life Year (QALY), which is obviously too expensive compared to, for example, the national norm of twenty thousand euro’s per QUALY for vaccination. It may come as no surprise that the Legionnaires’ prevention policy was silently not ‘fully’ implemented.

VI. Further steps are possible and necessary

Having reviewed the causes of excessive regulation it is first of all clear that more research is still required to determine to what extent the intractable citizen and the self-minded risk

³⁵ Ira Helsoot, “Handhaving brandveiligheid; wat is er bereikt vijf jaar na Volendam”, in Erwin Muller and Lex Michiels, Handhaving (Den Haag: Kluwer 2006)
³⁷ The Health Council adds that the actual number of unreported cases may be considerably higher, estimating it at 800.
expert influence public policy.

Starting from the assumption that these are both real underlying causes for the RRR it is equally important to develop ways for decision-makers to overcome these obstacles. The Dutch R&R Programme confronted, as a start, (national, provincial and local) politicians with the concept of the intractable citizen through workshops and discussion sessions. The idea was that by providing them with a better understanding of citizens’ wants and needs it might give them the opportunity to counteract the Risk Regulation Reflex. In a series of 11 in depth interviews\textsuperscript{38} held in March and April of this year with provincial and local administrators, the common theme was ‘this is what we already felt, but in order for us to be able to really use it, the members of municipal and provincial councils and parliament have to be convinced too’.

Another step forward explored at this moment in the R&R programme is to develop ways to get around the single-minded risk expert. As a case in point, one could consider the measure ‘every new rule must replace an old one’. In Austria, for example, there exists a statutory rule obliging ministries to reconsider old legislation when new legislation is introduced\textsuperscript{39}. In practice this statutory obligation does not have the intended effect, because the risk professionals in the ministries give it too little priority\textsuperscript{40}. In order for this measure to have an effect, a solid frame must be developed out of which no risk professional can escape. A path towards a solution for this in the Dutch context might be making it obligatory to refer to the rule to be removed in the last section of the Memorandum of Explanation of any new proposed law.

\textsuperscript{38} The interviews of 1-2 hours each were held to discuss the RRR. All interviews have been transcribed and are available for review by contacting the authors.

\textsuperscript{39} Deregulierungsgesetz 2006

\textsuperscript{40} P.O. de Jong and S.E. Zijlstra, \textit{Wikken, wegen en (toch) wetgeven: Een onderzoek naar de hiërarchie en omvang van wetgeving}, (Den Haag: WODC 2009), at p. 156.