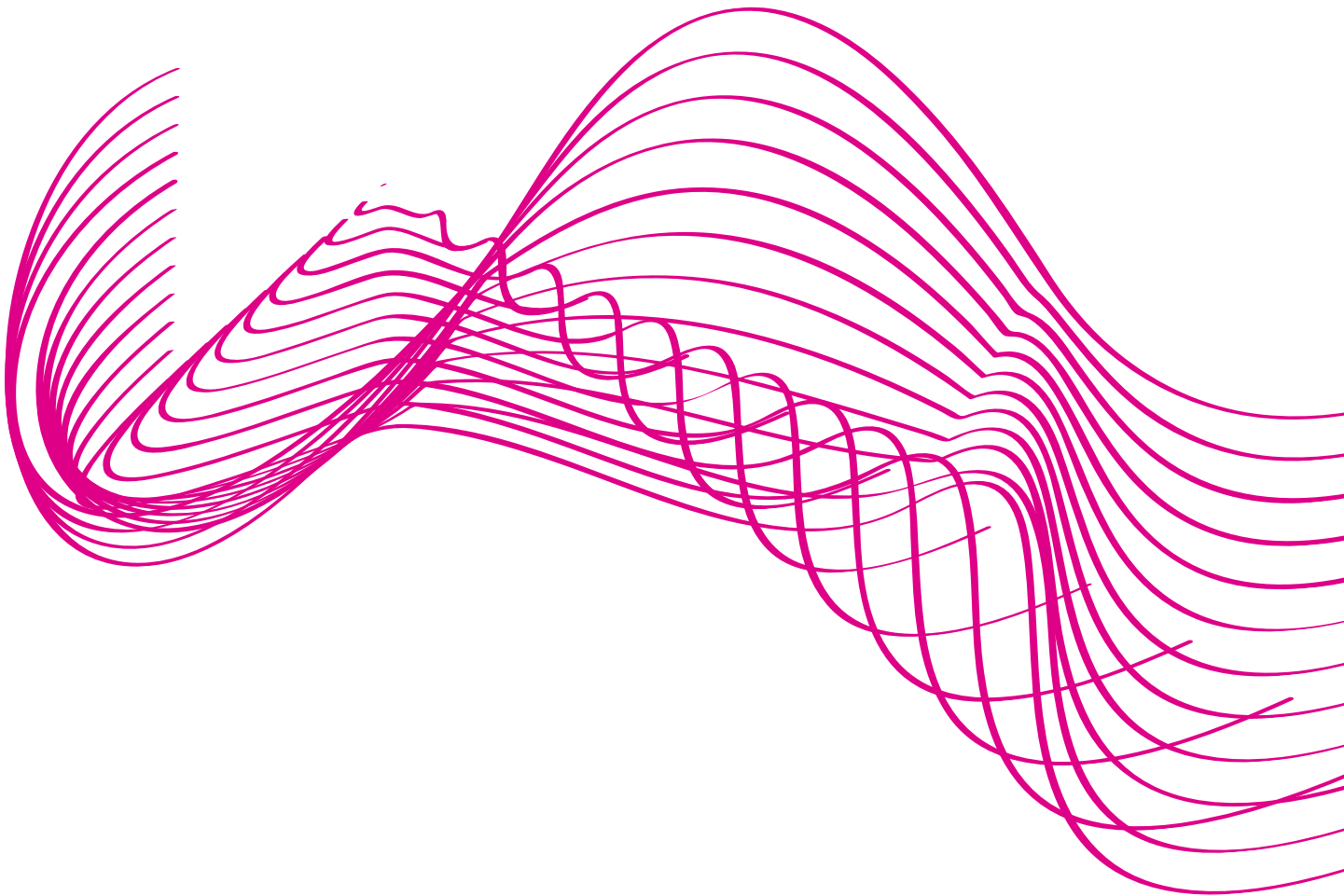




Measuring Regulatory Performance

EVALUATING REGULATORY MANAGEMENT TOOLS AND PROGRAMMES

By Claudio Radaelli and Oliver Fritsch



ORGANISATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT

The OECD is a unique forum where governments work together to address the economic, social and environmental challenges of globalisation. The OECD is also at the forefront of efforts to understand and to help governments respond to new developments and concerns, such as corporate governance, the information economy and the challenges of an ageing population. The Organisation provides a setting where governments can compare policy experiences, seek answers to common problems, identify good practice and work to co-ordinate domestic and international policies.

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EVALUATING REGULATORY MANAGEMENT TOOLS AND PROGRAMMES

The OECD has rekindled the debate on measuring the performance of regulatory instruments and regulatory oversight institutions. This report presents and appraises indicators suitable for measuring the performance of smart regulation programs. These reform programmes cover the production and implementation of regulation across sectors, enhance governmental capacity to provide high-quality regulation, and are neutral to the total level of state intervention and regulatory activity. It distinguishes between various types of indicators situated at different points of regulatory policy: the Input to regulatory action, the Process of guiding regulators through requirements, the Output generated during a given period of time, the Intermediate outcomes such as behavioural and cognitive changes, and the Final outcomes. After having examined the usage of indicators in various OECD member states, the report appraises a large number of regulatory indicators by using a set of criteria, suggesting how and when they should be adopted, and for which purposes.

FOREWORD

OECD countries require better information about where investments in programs to improve regulations should be focused to pay growth and welfare dividends. This is necessary to target scarce resources for reform efforts, and also to communicate progress and generate the political support needed for implementing regulatory policy reforms. The work of the OECD's Regulatory Policy Committee on *Measuring Regulatory Performance* is intended to assist countries with the task of identifying this information through the development of measurement frameworks and the collection and interpretation of salient data (www.oecd.org/regreform/measuringperformance).

The OECD is developing a framework for Regulatory Policy Evaluation to help countries evaluate the design and implementation of their regulatory policy against the achievement of strategic regulatory objectives (OECD, forthcoming). Its development has been informed by a series of three expert papers.

This paper examines country practices for measuring the performance of regulatory policy, and develops options for a set of indicators that OECD countries can use for their regulatory policy evaluation. It appraises a large number of regulatory indicators by using a set of criteria, suggesting how and when they should be adopted, and for which purpose.

It is the second paper in the OECD series of expert papers on Measuring Regulatory Performance. A first paper was prepared by Cary Coglianese, to discuss the attribution of changes in economic or welfare outcomes to changes in regulation and regulatory policy and suggest outcome indicators for regulatory policy. A third paper in the series was commissioned by the OECD from Professor David Parker, member of the UK regulatory policy committee and emeritus professor at Cranfield University and Professor Colin Kirkpatrick from the University of Manchester, to survey the literature on existing attempts at measuring the contribution of regulatory policy to improved performance (access the experts' papers on www.oecd.org/regreform/measuringperformance).

This paper has been prepared by Claudio M. Radaelli (Professor of Political Science, Jean Monnet Chair in European Public Policy and Director of the Centre for European Governance, University of Exeter) and Oliver Fritsch (Associate Research Fellow, Centre for European Governance and Department of Politics, University of Exeter). It benefitted from the extensive comments of Christiane Arndt and Gregory Bounds at the OECD Regulatory Policy Division, information sent to the authors by the members of the Steering Group on Measuring Regulatory Performance, and the discussion of an early draft in an expert meeting in Madrid in 2011. Any remaining errors remain the authors' sole responsibility.

The project of developing a framework for Regulatory Policy Evaluation has also been directly supported by the Government of Canada, which in 2011 provided a financial contribution to the project, and by the Government of Spain, which hosted an expert workshop on Measuring Regulatory Performance in Madrid on 26-27 September 2011. Overall the work has benefitted from the active engagement of the steering group on Measuring Regulatory Performance, which has had an advisory role in the project. The steering group is an *ad hoc* body of delegates to the Regulatory Policy Committee.

The OECD Regulatory Policy Committee

The mandate of the Regulatory Policy Committee is to assist members and non-members in building and strengthening capacity for regulatory quality and regulatory reform. The Regulatory Policy Committee is supported by staff within the Regulatory Policy Division of the Public Governance and Territorial Development Directorate. For more information please visit www.oecd.org/regreform.

The OECD Public Governance and Territorial Development Directorate's unique emphasis on institutional design and policy implementation supports mutual learning and diffusion of best practice in different societal and market conditions. The goal is to help countries build better government systems and implement policies at both national and regional level that lead to sustainable economic and social development.

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EXECUTIVE SUMMARY

This report provides an analysis and assessment of indicators of regulatory quality. The focus is on policy instruments and oversight activities that (a) cover the production and implementation of regulation across sectors rather than disciplining individual domains, (b) enhance governmental capacity to provide high-quality regulation (e.g. consultation, access to regulation, transparency), and (c) are neutral in relation to the total level of regulatory activity. The main aim of the report is to finalise a set of regulatory indicators for discussion in the OECD steering group on Measuring Regulatory Performance. The report does not describe how instruments and oversight institutions affect economic performance – this is the subject of a companion paper to be delivered by Professor Cary Coglianese.¹

At the outset, the report distinguishes the following steps in the causal chain of regulatory reform (a) the input – such as organising human and financial resources for smart regulation; (b) the process (or system) that allows the inputs to connect and operate; (c) the output refers to the activities carried out in a given period, such as how many consultations or impact assessment took place in a year, whether individual consultations match the quality standards set in the system, and so on; (d) intermediary outcomes cover behavioural and cognitive change, considering among other things how citizens and the business community perceive the regulatory efforts of the government. The final outcomes show the impact of smart regulation on economic indicators.

The report finds that there are many indicators used for large-scale descriptions and comparisons. More often than not, these indicators do not provide information useful to policymakers in order to change the regulatory reform instruments they control. The OECD has gathered a coherent set of system-level indicators. The report considers that the systemic level is well taken-care of by these indicators. However, governments have been less active in adopting output and intermediary outcome indicators. The final set of indicators of economic outcomes is only mentioned in this paper.² The report argues that input indicators are relatively easy to gather, but more conceptual effort is needed in identifying output and intermediary outcome indicators and how they should be used.

Section 2 provides original data on how some OECD countries collect and utilise regulatory indicators. The experience is still limited and skewed. Limited because there is a lot of information in the regulatory management systems that is not collected systematically as indicators. Skewed because measurement has focused on some instruments and domains of regulatory reform, especially the cost of complying with administrative obligations, and has ignored other instruments and areas.

Section 3 addresses the question: How should governments approach the design and of indicators? We suggest a re-calibration from burdens to the wider concept of regulatory costs: from the ‘cost’ side (of the regulatory equation) to the ‘benefit-cost’ perspective; from limited aspects of perceptions measured on firms to perceptions of regulatory effectiveness measured on firms, citizens and regulators; from the exclusive emphasis on regulatory instruments or tools to the joint consideration of tools and oversight structures; from the economic dimension to wider dimensions, including rights, inter-temporal efficiency and sustainability; and finally from production to usage of indicators.

The report then examines individual regulatory indicators in two modes, i.e. descriptive and evaluative. After having considered the two modes, we suggest whether a given indicator should be adopted or not. Taken together, the indicators provide a control panel for regulatory management. The panel can be used to obtain information on the overall performance (instruments and oversight structures) or to focus on particular tools. Obviously, the greatest advantages of the control panel come from using it across the years, with the data gathered in year 1 as baseline to measure progress over time. Comparison across countries is limited to some indicators and in any case comparisons should be sensitive to the different institutional and policy context of rulemaking and lawmaking across the OECD countries.

The report then turns to the issue of using indicators and, in particular, how to use them for learning purposes. These are the topics covered by the last two sections. Indicators can be used for management, communication, and accountability (Section 4). Major emphasis is on management because this is a precondition for communication and accountability. Without management, there is very little to communicate and no accountability. Communication is strong when objective measures are matched by perception indexes. However, the experience on administrative burdens shows that there is often a gap between objective and subjective measures. In these circumstances, a communication strategy should explain why the gaps exist rather than denying their existence. It is also suggested to communicate both annual progress and the longer-term vision of regulatory reform. Regulatory reform is after all a narrative of change, and like in all stories trust in the narrator is important – the identification of the person responsible for communication and 'telling the story' is a crucial step. On accountability, the main danger is to fall into unrealistic expectations that all end-users of regulation will engage with regulatory indicators. The report suggests some realistic and sensible ways to utilise indicators for accountability purposes.

The final section of the report (Section 5) looks at one particular aspect of utilisation: learning. There is a classic trade-off between oversight and learning. The more we control, the less we create conditions favourable to learning. The less we control, the higher the chances for learning within and between organisations as well as between countries. However, there is a side effect: The less we monitor, the less we are able to channel these newly created instances of learning towards specific goals for change. This trade off between learning and monitoring, however, can be eased by designing jointly the indicators and the processes in which they are used. Countries that adopt indicators but do not design a process in which they should be used are pre-destined to failure. An annual parliamentary session on the regulatory agenda of the government, similar to the annual session on the finance bill, is a strong institutional incentive to use indicators. There are other processes in which indicators fuel learning. Looking at the relationship between the oversight unit and the departments, indicators can be employed to structure an annual workshop of on regulatory quality within different departments. Economic regulators may have their own reflective processes, fostered by the use of common methodologies, language and measures. Regional governments may engage in benchmarking drawing on common sets of indicators.

International organisations like the OECD and the European Commission have a major role to play in the diffusion of indicators. The OECD is an active agent of cross-national learning. Its regulatory reviews of individual member states would benefit from the inclusion of a standard chapter showing the trend of regulatory indicators in that country.

1. Introduction

The *regulatory reform agenda* is always work in progress. Since the 1970s, there have been different waves of reform emphasising de-regulation, privatisation, re-regulation, and the creation of independent regulatory agencies. Regulation indeed is a broad term covering a number of governance activities carried out by the state, international organisations, private actors, and civil-societal organisations. In this report, we discuss indicators suitable for measuring the performance of programs that (a) cover the production and implementation of regulation across sectors rather than disciplining individual domains, (b) enhance governmental capacity to provide high-quality regulation, thus embracing a governance agenda (consultation, access to regulation, transparency, participatory policy making using information and communication technologies), and (c) are neutral to the total level of state intervention and regulatory activity (OECD, 2002, 2008a). Activities measured by such indicators are often linked to notions of ‘better regulation’ (Lofstedt, 2007; Radaelli, 2007; Wiener, 2007; European Commission, 2009), “smart regulation” (Baldwin, 2005; Jensen *et al.*, 2010; European Commission, 2011) or ‘regulatory oversight’ (Alemanno, 2007; Wiener and Alemanno, 2010). The emphasis is on the quality of regulation, although the smart regulation movement across the OECD has also features of ‘quantity’ such as the programs for the reduction of administrative burdens implemented in several countries (OECD, 2007) and the “one-in-one-out” initiative in the United Kingdom (Better Regulation Executive, 2011).

Reviewing the literature

There is a large body of literature dealing with *regulatory reform indicators*. This includes pioneering works such as the OECD paper by Nicoletti, Scarpetta and Boylaud (1999) and studies focusing on the regulatory dimension of good governance (Kaufmann *et al.*, 2003, 2005), regulation and competitiveness (as evidenced by indicators of the World Economic Forum), and comparisons between objective indicators and perceptions-based indicators of the extent of regulation (Nicoletti and Pryor, 2001). Jalilian, Kirkpatrick and Parker (2007) have measured the effects of regulatory reform on economic growth, thereby providing a broad review of studies of regulatory quality and economic performance in developing countries. The World Bank has developed a large data-set of governance indicators with composite measures covering voice and accountability, political instability, government effectiveness, rule of law, corruption, and regulatory quality (price controls, market restrictions, burdens on business). Radaelli and De Francesco (2007) have surveyed the cross-country experience and designed indicators of regulatory quality for four instruments: impact assessment, consultation, simplification, and access to regulation. Their survey of regulatory performance measures includes Australia, Belgium, Canada, Denmark, the Netherlands, Sweden, the United Kingdom, and the United States. In Australia, policy officers (Argy and Johnson, 2003) and academics (Carroll, 2007) have commented on the use of regulatory performance indicators by the government.

Crafts (2006) has reviewed the evidence on quantitative estimates of the *regulatory effects* on macroeconomic productivity outcomes. He also addresses compliance costs, noting the weakness of measurement in this area:

“[T]here is, as yet, relatively little evidence on the costs of regulation, either to permit international comparisons or to quantify the impact on productivity in the UK. If, however, regulation has had a substantial impact on productivity growth, then it will have done so through its distorting effects on investment and innovation, rather than simply through administrative costs.” (*ibid.*, p. 192)

The literature on the results of the more recent wave of *better or smart regulation reforms* is scant. In 2005, Kox produced findings on the economic effects of administrative burdens. At the OECD, Jacobzone *et al.* (2010) used the results of the OECD surveys of regulatory quality to present trends across the OECD member states, including correlations with other datasets such as the Doing Business Indicators project

initiated by the World Bank. Using different types of regression (fixed effects and random effects) they also estimate the impact of regulatory reform on growth. Radaelli (2010) provides ten-point scales to measure theory-predicted effects of better regulation in six countries and the European Commission, showing high variability in the results achieved by governments using regulatory impact assessment (RIA).

The OECD has developed an index of requirements for and extent of *regulatory impact assessment* based on data provided by the member states. The European Commission-funded project EVIA, Evaluating Integrated Impact Assessments, generated work on regulatory indicators by Anne Meuwese and Claudio Radaelli. Amongst others, the authors suggest differentiating regulatory indicators by purpose. Further, they develop design criteria such as effectiveness (or ‘economic sophistication’), accountability, and oversight (Evaluating Integrated Impact Assessment, 2008). Another European Commission-funded project, European Network for Better Regulation, led by the Centre for European Policy Studies, established a database of impact assessments called Diadem where individual RIAs produced by different European countries are coded according to a list of quality indicators covering problem definition, consultation, analysis of alternative options, economic evidence, and models. The data in Diadem are now out-of-date, but the template followed to code RIAs is still useful. The Centre for European Policy Studies has carried on with the coding of all RIAs produced by the European Commission, drawing on a coding frame that extends the previous Diadem template (Fritsch *et al.* 2012). Recently, Carroll (2010) has addressed the topic of how policy makers use of regulatory impact assessment. His paper is part of the broad qualitative literature on RIA usages (see Radaelli, 2009 among others). Both in Europe and the United States, studies have been published on coding different aspects of regulatory impact assessment (Renda, 2006; Cecot *et al.*, 2008; Hahn and Tetlock, 2008). Again, this type of study is based on a scorecard containing several items (such as problem definition, analysis of options, and quantification). Cecot *et al.* (2008) apply the scorecard method to each individual RIA and then cumulate the results in simple tables of United States (US) and European Union (EU) performance – although with a sufficiently large sample a proper statistical analysis would be possible.

A consultancy firm (Jacobs, 2009) has provided a state-of-the-art paper on regulatory indicators and made suggestions for *implementation* in Canada. Jacobs (2009) and Radaelli and De Francesco (2007) suggest different systems of indicators to be implemented over time: a basic system in year one, an operational system to build capacity for oversight and measurement, followed by a management system. Thus there is an important issue concerning priority and the process of rolling out indicators over time, starting from simple measures, building capacity, and then moving on to more sophisticated types of indicators for the management of regulatory systems. Among others, Jacobs has focused on the management of the regulatory system in that indicators provide information that policymakers can relate back to the instruments they control. We shall follow up on priorities and management in the remainder of this report.

Contribution of this report

This report *examines and appraises* the state of play with a range of regulatory quality indicators. It thereby *contributes* to the specialised body of work on measuring regulatory reform performance and the usage of tools like consultation, the standard cost model, and regulatory impact assessment. Measuring results is important

- for *communication* purposes;
- because data are indispensable to *manage* the regulatory system and plan reform, including termination of programs that are not producing the expected results, and
- to establish *accountability* and show the value for money of regulatory reform.

Measuring the performance of regulatory reform involves *different elements* such as concepts, indicators, and evaluation. Concepts define dimensions of quality. They should be derived from key principles of regulatory reform, e.g. effectiveness, legitimacy, fairness, simplification and comprehensiveness. Indicators are quantitative expressions of phenomena captured by concepts. Evaluation draws on systems of indicators. However, it also necessitates cumulative findings from case studies, interviews, surveys or scorecard approaches.

This report is dedicated to *measuring and reporting performance in the field of regulatory reform*. It does not systematically discuss the wider economic effects of regulatory reform, or the relationship between reform and final outcomes. This is the subject matter of another report, prepared for the OECD Regulatory Policy Committee.

Structure of the report

The report is *organised* as follows. Section 2 reports on the cross-national experience with measuring performance of regulatory reform. Section 3 introduces design principles and provides a panel of indicators for regulatory management. This is the key component of our paper, and is supported by tables portraying the panel of indicators and how they appraised. Section 4 tackles the usage of indicators while Section 5 is concerned with learning through the production and usage of indicators.

2. The cross-country experience

In this section, we present indicators used by countries to measure and appraise the quality of their regulatory reform policy. We briefly present our methodology and then discuss *five types of indicators*: input indicators, process indicators, output indicators, intermediary outcome indicators, and final outcome indicators.

- *Input* – these are design activities, such as adopting consultation, the standard cost model for the reduction of administrative burdens, and impact assessment, or establishing a regulatory oversight body.
- The *process* of connecting the inputs and producing results. Typically, processes define the scope and extent of tools like impact assessment, how the standard cost model is going to be used in practice, and the standards for consultation and other regulatory activities.
- The *output* refers to the activities carried out in a given period, such as how many consultations or impact assessment took place in a year, whether individual consultations match the quality standards set in the system, and so on;
- *Intermediary outcomes* cover behavioural and cognitive change, considering how regulators and inspectors perceive regulation, and how citizens and the business community rate the regulatory efforts of the government. Data on inspections and enforcements also belong to this category.
- Finally, the causal chain should also show the effects of regulatory reform on *final outcomes*, such as number of new firms created and other classic economic indicators that are causally linked to regulatory activity.

This analysis provides the basis for recommendations made in Section 3 on the future development and usage of indicators in regulatory reform.

Methodology

During the preparation of this report we relied on the following three *data collection methods*: a questionnaire, expert interviews, and an analysis of domestic policy documents. We considered regulatory reform tools or programs that were used or initiated at a national or supranational level and were applied across policy sectors. Hence, we disregarded regulatory reform tools or programs at subnational level (e.g. municipalities, regions, states) or those targeting individual policy fields (for instance health policy, environmental regulation, or social security).

Questionnaire: We sent out a questionnaire to representatives of countries that engage in the OECD Ad Hoc Steering Group on Measuring Regulatory Performance. The following ten countries were involved: Australia, Canada, Denmark, the Netherlands, New Zealand, Norway, Spain, Sweden, the United Kingdom, and the United States. The questionnaire asked three sets of questions related to:

- *Key actors and institutions* involved in regulatory reform, e.g. audit offices, regulatory oversight bodies, and departments or ministries related to the measurement and evaluation of regulatory reform, and relevant publications and reports.
- *Indicators* of regulatory performance, the sector of regulatory policy they cover (e.g. quantity of laws, procedures of administrative appeal, regulatory impact assessment, public access and consultation, the reduction of administrative burdens, or ex-post regulatory reviews), who gathers them, when, and since when.
- *Usage* of these indicators, methods and tools, e.g. public debates, parliamentary hearings, communication efforts.

Expert interviews: Building on the responses received on the questionnaire, we talked to national experts in order to enhance our understanding of how regulatory policy performance is measured in specific policy contexts.

Analysis of policy documents: Finally, we conducted a web search for policy documents related to regulatory reform and to the measurement of regulatory policies. We hereby focused on regulatory oversight bodies, national audit offices and government departments promoting regulatory reform.

Input indicators

Budget: The overall budget provided for regulatory policy and oversight at departments and agencies is considered a useful indicator for the capacity of a regulatory system. Although the regulatory budget could easily be extracted from departmental or state budgets, countries rarely make this information public and use it systematically as an indicator. Radaelli and De Francesco (2007), *Evaluating Integrated Impact Assessment* (2008) and De Francesco, Radaelli and Troeger (2012) report on the application of this indicator in Europe, Northern America and Australasia.

Staff: In a similar vein, staff involved in regulatory policy and oversight across departments and agencies is a fairly significant indicator for the capacity of a regulatory system. As part of departmental or governmental work plans, staff numbers are available in many OECD member countries (Radaelli and De Francesco, 2007, *Evaluating Integrated Impact Assessment*, 2008 and De Francesco, *et al.*, 2012). However, so far this data is not systematically used in those countries to produce indicators of regulatory capacity.

Training: The number of public officials in departments and agencies participating in training on regulatory policy and oversight is an alternative measure for the capacity of regulatory systems. Since late 2008, authorities in New Zealand measure the extent of training on RIA offered, calculated by numbers of officers trained. De Francesco, *et al.* (2012) in their comparative study discuss this indicator.

Process (or system-level) indicators

In 2009, the OECD published a report on *indicators of regulatory management systems*. The OECD report provides indicators on how 31 member states have designed their system of regulatory reform. These indicators refer to the main characteristics of the process through which regulation is produced, appraised and implemented, covering forward planning, RIA, consultation, the reduction of administrative obligations and other dimensions and tool. It is important to observe that these indicators inform on the presence or absence of certain features in the regulatory process of a given country. such as whether impact assessment guidelines cover the environmental dimension or not, or whether there is a plan to evaluate and eliminate red tape. These indicators do not tell us how the individual impact assessments or the plan to eliminate administrative obligations fare in relation to the criteria and timetable set by the government. In developing these indicators, the OECD took a systemic perspective. Since these indicators are internally coherent, and in most cases have been measured already in three different periods of time, we consider that there is nothing to add to this important dimension of smart regulation. This report supports the adoption and usage of these systemic indicators in the context of the larger control panel proposed here. Put differently, the process or systemic dimension is well-taken care of by using the OECD indicators.

Output indicators

Forward planning: Countries engage in forward planning if they publish on a regular basis plans for the introduction, review or repeal of primary laws and subordinate regulations.

- The proportion of regulatory agencies publishing such a plan is a *quantitative* measure of forward planning (Jacobs, 2009). While a number of OECD countries plan their legislative and regulatory activities, only a few collect the data required to assess the application of that tool. Most prominently, Australia (Office of Best Practice Regulation, 2009) and New Zealand measure this indicator.
- To our knowledge, no country measures the *quality* of forward planning, i.e. the degree of detail, understandability, reliability and completeness of forward plans.

Regulatory impact assessment: The systematic appraisal of legislative proposals is, next to consultations and the ex-post assessment of regulatory burdens, the most widely used tool in regulatory reform. OECD countries have developed diverse methods to assess departmental and agency performance in policy appraisal:

- *Comprehensiveness of the RIA system:* The absolute or relative (in per cent) number of primary laws and, measured separately, subordinate regulations appraised is a significant quantitative indicator for the performance of a RIA system. Obviously, findings depend on the number of exemptions from policy appraisal, i.e. for minor or urgent legislative initiatives or those subject to confidentiality. Australia and New Zealand calculate this indicator, whereby Australia covers three related dimensions: the proportion of regulations requiring a RIA for which an adequate RIA was prepared, the proportion of regulations requiring a stand-alone assessment of compliance costs for which an assessment was provided, and the proportion of regulations requiring a RIA or stand-alone assessment of compliance costs which met the requirement to undertake a preliminary assessment and consult with the regulatory oversight body before a

decision was made (Office of Best Practice Regulation, 2009). Further, Sweden measures the number of regulatory proposals that lack an impact assessment.

- *RIA guidelines*: Many countries have developed guidelines to aid officers during the preparation of RIAs, for instance Denmark (Regeringen i Danmark, 2005), Sweden (Regeringskansliet, 2007), and the United Kingdom (Better Regulation Executive, 2010). Based on legally binding statutory requirements or non-binding recommendations, guidance documents present items obligatory for regulatory appraisals, e.g. the identification of a specific regulatory problem, the consideration of alternative options, the measurement of positive and negative economic effects, a discussion of whether rights were involved and, if so, the respective consequences, compliance costs, environmental and social impacts, provisions on implementation and enforcement, as well as contact names and email addresses.
- *Qualitative assessments of the quality of RIA*: Guidelines constitute a baseline against which national regulatory oversight bodies may assess the quality of individual policy appraisals. Such qualitative assessments are conducted in, amongst others, Canada, the Netherlands, New Zealand (NZIER, 2009, Legislation Advisory Committee, 2008, 2010, 2011), Sweden (Swedish Better Regulation Council, 2011), and the United Kingdom (National Audit Office, 2007a, Regulatory Policy Committee, 2011a). However, checklists are rarely transformed into indicators that could be used in order to assess the overall production of RIAs in a given country. Many national oversight bodies have therefore checklist items in mind when assessing RIAs yet focus on qualitative comments on individual assessments rather than systematic quantitative analyses. Furthermore, countries are somewhat selective with regard to the core areas of their impact assessments and focus, for instance, on economic impacts rather than environmental or social ones.
- *Compound RIA quality indicators*: A few countries, however, go beyond qualitative assessments and use compound quality indicators derived from or, at least, reflecting upon criteria to be found in the guidelines. For many years, the United Kingdom has assessed the quality of RIA through a set of six indicators (National Audit Office, 2005, 2006a, 2007a):
 - Was the scope and purpose of RIAs clearly defined?
 - Was consultation effective?
 - Did the department assess costs and benefits thoroughly and realistically?
 - Did the RIA realistically assess compliance?
 - Will the regulation be effectively implemented, monitored and evaluated?
 - Did the RIA consider the impact of the regulation on competition?

Each of these indicators summarises a number of sub-indicators. With regard to consultation, for instance, the following sub-indicators informed the overall assessment:

- Was effective consultation started early in the process?
- Were appropriate techniques used?
- Did the department explain clearly the impact of regulation?

- Were all interested stakeholders consulted, including within Government?
- Were the impacts on small businesses considered?
- Were the results of consultation used appropriately?

In a similar fashion, the United Kingdom has looked into impact assessment of economic regulators (National Audit Office, 2007b). Since 2010 the Regulatory Policy Committee appraises the quality of regulatory impact assessment in the United Kingdom using five indicators measuring the quality of justification for intervention, of presentation of options, of evidence base, of cost-benefit analysis and of the overall presentation (Regulatory Policy Committee, 2010, 2011b, 2012). Authorities in New Zealand use indicators internally only, amongst others the proportion of papers that (a) consider regulatory policy issues or options, (b) that identify whether the RIA requirements apply, (c) that report substantive public consultation, and (d) that include a partial or full quantification of costs and benefits. These measurements could easily be used for the creation of compound indicators. Further, the consultancy group NZIER (2009) supports the government of New Zealand in assessing the quality of policy appraisal offering qualitative judgments and then calculating simple aggregate statistics. Likewise, the Swedish Better Regulation Council (2011) publishes annual reports containing information about the number of opinions by the Council and how many RIAs were considered acceptable, deficient or missing across departments. Further, Hahn, Lutter and Viscusi, 2000; Hahn and Tetlock, 2007, Hahn and Dudley, 2004, Cecot *et al.* (2008) and Fritsch *et al.* (2012) offer comparative assessments of the EU, the US and the UK, using a scorecard approach.

- *Sampling:* Countries tend to assess the quality of RIAs on basis of samples (for the UK, see National Audit Office, 2007b, 2010) or other formats of prescreening (for the UK, see Regulatory Policy Committee, 2010, 2011a, 2011b, 2012) rather than the full annual and departmental population of prelegislative appraisal. At times, oversight bodies focus on specific kinds of appraisal, e.g. of social and environmental benefits and costs (for the UK, see National Audit Office, 2006b) or those produced by specific agencies such as economic regulators (for the UK, see National Audit Office, 2007b).
- *Surveys and desk research:* So far, all indicators presented were objective in nature and mainly measured through scorecards. However, both the European Commission and the National Audit Office in the United Kingdom have experimented with perception surveys in order to measuring the performance of regulatory impact assessment. At times, the National Audit Office (2010) complements scorecard approaches with interviews or surveys of desk officers. Similarly, The Evaluation Partnership, a London-based consulting company, assessed the European Commission's RIA system and conducted surveys both with stakeholders and regulators. Further, The Evaluation Partnership carried out desk research with a view to obtain additional information on guidelines, policy documents, and external reports resulting in six in-depth case studies of impact assessment at EU level. Further, Canada commissioned a similar study more than ten years ago (Regulatory Consulting Group and Delphi Group, 2000).

Consultation: The involvement of non-state actors in regulation is a cornerstone of the good-governance discourse and a key item on the better regulation agenda. While all studied countries have extensive mechanisms in place to consult business and civil-societal actors on forthcoming legislation and rulemaking, few initiatives have been started to measure the quality and quantity of these efforts.

- To our knowledge, Australia is the only country that has developed an indicator measuring the *quality* of consultation in rulemaking. Measurements provide information on the proportion of regulations for which the consultation process was 'adequate'. The substance

of ‘adequacy’ is derived from internal guidelines. There is no information available on the quality of specific dimensions of consultation, i.e. scope, timing, and duration (Office of Best Practice Regulation, 2009). Australian authorities complement insights gathered through this indicator with additional information provided in RIA documents (Carroll, 2007). Further, the Productivity Commission (2010) calculates the numbers of stakeholder submissions received, hence providing a quantitative measure.

- Other countries such as the United Kingdom National Audit Office, 2007a, 2010) or New Zealand (NZIER, 2009) use *information provided in RIAs* in order to draw conclusions about the quality of consultation.
- *Perceptions surveys* among business and non-governmental organisations are an alternative to objective measures of the quality and quantity of consultation in rulemaking. So far, no country uses this approach. However, as will be argued later, some countries do more general perception surveys on regulation and regulatory reform that potentially could include a question on consultation and involvement.

Post-implementation reviews are carried out in many countries but their number and performance is rarely measured systematically. Since 2009, New Zealand assesses the number and status of post-implementation reviews. Likewise, the UK’s National Audit Office calculates the percentage of regulations for which a post-implementation review is produced (National Audit Office, 2009b). Based on survey data, the National Audit Office also provides estimates about the types of review carried out and how results from post-implementation reviews have been used.

Intermediate outcome indicators

Perception surveys among regulators: According to our knowledge, the Netherlands are the only country to have conducted systematic perception surveys among regulators with a view to core themes of regulatory reform. Building on previous studies in 2005 and 2006, in 2010 the Netherlands conducted a perception survey among 1 000 employees of all ministries (ACTAL, 2011). The survey had an individual and an organisational component. With regard to individual officers, the survey examined the knowledge, attitudes, and conduct of individual government officials when it comes to reducing administrative burdens. At an organisational level, the survey sought to establish the level of attention paid by ministers and senior officials to reduce administrative burdens in the rulemaking process.

Perception surveys among business and citizens: Perception surveys examine issues of satisfaction with, perceptions and attitudes on, and understanding and awareness of regulation and government attempts to improve the regulatory environment. Perception surveys are conducted on the telephone, via mail or face-to-face and have become a key tool in many national better regulation policies.

- The following countries conduct perception surveys among *business representatives*: Australia (Ipsos-Eureka, 2009), Belgium (Kegels, 2010), Canada (Government of Canada, 2006b, 2006a, 2010a, 2010b, Canadian Federation of Independent Business, 2010), Denmark (Rigsrevisionen, 2007), Netherlands (Deloitte, 2010; Stratus, 2010; ACTAL, 2011), New Zealand (BusinessNZ KPMG, 2008), Spain (see Camaras, 2010), the UK (MORI, 2007a; National Audit Office, 2009a).
- The United Kingdom also conducted a survey among *citizens* (MORI, 2007b).
- Surveys examine the following *issues*: perceptions of the government’s approach to regulation, key burdens when complying with regulation, how people experience

regulation through their work and personal lives, fairness and proportionality, complexity of government activities, government understanding of business needs, quality of consultation, importance of reducing regulation, awareness of government activities (OECD, 2012).

Specific measurement of the performance of regulatory oversight structures (or regulatory quality assurance bureaus) like the Better Regulation Executive in the UK are scarce. There are annual reports produced by regulatory quality bureaus offices, however, yet the quality and quantity of public reporting differs. In Spain, a number of governmental agencies report on regulation and regulatory reform, e.g. the Ministry of Territorial Policy and Public Administration, various regulatory agencies on energy, competition, telecoms, as well as the Ombudsman (The Ombudsman of Spain, 2009). The Swedish Better Regulation Council (2011) informs about its activities while the UK's National Audit Office, the Better Regulation Executive and the Regulatory Policy Committee engage in extensive attempts to inform the public about progress made on regulatory reform (Better Regulation Executive, 2009; National Audit Office, 2011; Regulatory Policy Committee, 2011a). Likewise, the US Office of Management and Budget reports regularly to Congress (2009, 2010, 2011).

It should also be observed that regulatory oversight is a *broad, multi-bureau function*. Over the last decade, several countries have invested in a robust oversight framework by using regulatory oversight bodies, but also independent watchdogs for specific functions (such as measuring and validating the reduction of administrative burdens by individual departments), and new regulatory quality bodies like the UK Regulatory Policy Committee that specialise in one function (in this case, a quality assurance function concerning the RIAs produced by the departments).

Number of laws and pages: Many OECD member countries report on the number of primary and secondary legal acts that could be used as an indicator of the extent of legislation and regulation. For example, in Sweden the Regeringskansliet (2010) calculates the number of legal acts and regulations across policy areas. Equally, the UK's Law Commission 2006 calculated the number and pages of public general acts, rewrite acts, consolidation acts and statutory instruments. In New Zealand, authorities calculate the numbers of primary and secondary legislative instruments in force, broken down by administering agency.

Final outcome indicators

Final outcomes are the subject of the companion paper delivered by Professor Coglianesi.³ There is plenty of information available at this level. In the past, studies carried out by the European Commission (Radaelli and De Francesco, 2007) have argued for the adoption across countries of *final economic indicators* drawn from the World Bank experience and classic single market and innovation measures. The Doing Business Indicators is yet another well-known set of economic indicators used for international comparisons. It hinges on two relationships: one between regulatory quality and the performance of firms; and another between regulatory quality and macro-economic performance. Although there is evidence supporting the former, the latter is more difficult to assess, given the many variables that generate a given level of macro-economic performance (IEG, 2008). We also need to consider the important role played by the historical and institutional context when we interpret Doing Business Indicators in a given country (Independent Evaluation Group, 2008).

Assessment of administrative burdens: In order to monitor the growth of their regulation, countries publish regulatory budgets, i.e. documents containing ceilings or targets of regulatory costs to be met by the various regulatory programs or agency departments. The international experience shows two different approaches to regulatory budgets: The holistic approach accounts for all regulatory costs and compares them to the regulatory benefits. We will discuss this approach more extensively in Section 2.18. The

minimalist approach, instead, focuses on a single component of the total regulatory costs, most prominently administrative burdens. Countries assess the achievements made in reducing administrative costs using the standard cost model.

- Several OECD member states have established *net administrative burdens reduction targets* and used *the standard cost model* in order to assess the achievements of these reduction initiatives. Australia (Productivity Commission, 2010), Austria, Belgium, Denmark (Government of Denmark, 2005, Center for Kvalitet i ErhvervsRegulering, 2010), Germany (Federal Statistical, Office, 2006), the Netherlands (Regulatory Reform Group, 2008, 2010), Norway (Norwegian Ministry of Trade and Industry, 2008), Poland, Spain, Sweden (Regeringskansliet, 2011), and the United Kingdom (National Audit Office, 2008a) aimed at reducing administrative costs by 25%. Belgium established reduction targets between 10 and 33% (depending on the department) and Spain aims at reducing burdens by 30% in a given time frame. More complete and detailed country-by-country data on these initiatives and programs can be found on www.administrative-burdens.com.
- In their *perception survey*, Canadian authorities explored the following issues: perception of changes in the overall cost of complying with regulations over the past three years, reasons for perceived increases in overall compliance costs, average annual costs per employee for the information obligations covered in the survey, total compliance costs, three-year trend analysis of factors affecting regulatory compliance costs, average nominal costs per business and employee (Government of Canada, 2010a, 2010b). Obviously, the measurement of administrative burdens through perception surveys bears a close resemblance to more general perception surveys of regulation. As argued above, the following countries conduct perception surveys among business representatives: Australia (Ipsos-Eureka, 2009), Belgium (Kegels, 2010), Canada (Government of Canada, 2006b, 2006a, 2010a, 2010b, Canadian Federation of Independent Business, 2010), Denmark (Rigsrevisionen, 2007), Netherlands (Deloitte, 2010, Stratus, 2010, ACTAL, 2011), New Zealand (BusinessNZ KPMG, 2008), Spain (see Camaras, 2010), the UK (MORI, 2007a, National Audit Office, 2009a).
- As an alternative measure, the UK's National Audit Office estimates, in a 2008 report, the *number of inspections* and compares types of enforcement actions across departments (National Audit Office, 2008b).

Total benefits and costs: One indirect way to measure how the overall oversight structure, composed of different bodies, performs is to look at broad indicators of total benefits and costs or total cost reduction (see also what we said on ex-post indicators). However, measurement of the overall effectiveness of regulatory oversight is in all countries still in its infancy. Most prominently, the United States measures the *sum of all costs of regulations* in effect (aggregate measure) and also calculate the cost-effectiveness (comparison of cost per unit of benefit) of regulations adopted during the year as well as costs and benefits of major rules and trends in the annual benefits and costs (Office of Management and Budget, 2009, 2010, 2011). These indicators are a compilation of RIAs.

To sum up our findings

The countries surveyed provide evidence of activities in regulatory reform and information about tools. However, there are few examples of countries that have also moved from *activities* and *information* to *data* and proper *indicators*. One common result across countries is that indicators are skewed around measurements of administrative burdens, whilst other areas of regulatory reform activities have been neglected. Even less common is the final step from indicators to their usage in regulatory management

strategies. It follows that over the next few years governments should seek to close the loop among these four important steps, and connect activities, information, data, and usage. If done gradually countries can learn from their early steps.

The *current state* of developing and using indicators resembles in a way maps of the planet showing different temperatures: In terms of presence or absence of indicators, we have very cold areas of regulatory reform, for instance responsive regulation and enforcement. We have temperate zones such as regulatory impact assessment. And we have areas that are definitively warm or hot such as administrative burdens. The climate is also cold in the ‘usage’ area but hotter in the domains of ‘activities’ and ‘information’ and temperate around ‘data’.

This map of the regulatory reform planet *stands in contrast* to the trajectory suggested by the OECD and other organisations like the World Bank and the European Commission. These organisations have suggested on several occasions to move from a narrow focus on administrative burdens to a comprehensive consideration of regulatory costs, and from cost considerations to benefit-cost principles. This is an important re-orientation of regulatory policy from quantity to quality of regulation, as is the move towards considering distributional effects of regulation or sustainability and climate change. In this connection, recent research for the World Bank has shown how impact assessment and other tools have to be re-calibrated to accomplish goals in the area of sustainability (Russel and Radaelli, 2010). Another important dimension concerns rights as a recent UK study demonstrates (Prosser, 2010): Regulators are involved in appraisal activities that are no longer limited to the dimension of economic efficiency but concern wider issues of rights as well as distributional issues. This is not a consequence of changing political goals. It is the effect of new legal frameworks governing regulators such as charters and human rights acts in Europe. New regulatory domains add to the dimension of rights the dimension of ethics and moral issues, as indicated by the regulation of scientific research in areas like stem cells and embryology (Prosser, 2010).

Finally, there is a problem with the current debate in regulatory reform in that the discussion of individual tools and their usage, including indicators of performance designed for each tool, although necessary, may miss the whole point of *integrated regulatory management*. Tools are important, but how they are connected is even more important. Equally fundamental is how governments allocate resources and oversight activities across the life cycle of regulation. In this connection, citizens and firms also demand information and data on the value-for-money of regulatory oversight. New regulatory oversight bodies have been established in the last ten years, and existing ones have maintained their importance. The question arises whether these new bodies show their value-for-money, report to elected officers such as parliamentary committees, and are themselves evaluated externally. This is a new area where regulatory oversight bodies are asked to pass their own benefit-cost test.

These are wide-ranging discussions, and some go well beyond the design and usage of indicators. However, the debate under way should at least inform indicators and point them towards the right direction. In the next section, we will discuss design criteria first, and then discuss and evaluate indicators for regulatory management. The management orientation makes these indicators complementary to but different from the indicators used by independent researchers to compare the regulatory systems of different countries. Management indicators have a strong link with policy instruments that can be calibrated by policymakers to produce desirable results, learn, and support communication campaigns.

3. Design and selection of indicators

In this section of the report we discuss *indicators of regulatory reform* in relation to a *list of important design criteria*. We explain first what the priorities are. Next we will turn to how the indicators can be

originated and the dimensions they cover. We will then devote to the criteria and assess the indicators against them.

Principles

Since resources are constrained, indicators of regulatory quality have to be developed with *clear priorities in mind*. Our review of the experience across a sample of OECD countries has shown that the progress made with regulatory indicators is limited and skewed. Limited because there is information, but the average OECD member state is not used to producing regulatory indicators. Even when regulatory reform generates indicators there is little in the public domain. There is basic activity as far as indicators for monitoring and internal accountability purposes are concerned and even less has been done in relation to measures used for communication purposes (be it communication to Ministers and parliamentary committees or communication for the general public). There are exceptions of course, but they concern a handful of countries. Paradoxically, there is information available in regulatory oversight bodies and more generally in government. The problem is that information is not collected systematically with the purpose of creating and using indicators.

One exception to this general rule is the type of yes-no information on the *Process* dimension of regulatory reform, i.e. characteristics of regulatory systems and oversight. With regard to regulatory management systems the OECD has already produced indicators, relying on self-assessed questionnaires compiled by governments. These indicators were collected in 1998, 2005 and 2008 (OECD, 2009). They represent a valuable repository of information, especially for the purpose of comparing countries and/or detecting how certain families or clusters of countries move over time, from 1998 to 2008 (Jacobzone *et al.*, 2007).

However, to compare and identify trends is *not the same thing* as to manage and take decisions. To manage the regulatory system and its tools, governments need a different type of indicators. Indicators of regulatory management provide information on how the tools are deployed on the ground and how the oversight structure performs. To illustrate, whilst the OECD indicators tell us whether a certain country has adopted consultation and uses a benefit-cost test for new regulation, they do not tell us how many consultations in a given year meet the government standards and if the benefit-cost test is applied systematically or not. The emphasis on the OECD indicators is on adoption of tools and the principles enshrined in the tools, not on how the tools perform. To make another example, the OECD indicators do not tell us how many RIAs in a given year have identified benefits, but only if the regulators are required (by government guidelines or existing administrative law) to identify benefits. For this type of information we have to turn to indicators often used by independent researchers (see literature reviews in Renda 2006, Radaelli and De Francesco, 2007) but not common in the experience of the governments we have surveyed.

As mentioned, regulatory measurement is also skewed. Most of the efforts since 2005 have been in relation to *administrative burdens*. This has been a very expensive activity with limited scientific basis (Helm, 2006). On the one hand, the OECD member states have invested in baseline measurement of administrative burdens. On the other hand, they have tracked down the progress made by validating the reductions of burdens communicated by the government with subjective measures based on responses of firms. In some cases, we have surveys that track down four or five years of responses, thus showing the patterns across time. These measurement efforts have been effective in a phase of regulatory management in which it was important to reach at least a 25% reduction of administrative burdens and validate this reduction by using the perceptions of the stakeholders.

Obviously it is important to maintain the administrative obligations baseline measurement 'alive' and make sure that burdens do not increase via new regulation. Guidelines for regulatory impact assessment

of new regulations have been often adjusted to achieve this goal. But it is widely acknowledged that once a country has invested resources in compressing burdens by 25% once or twice, *resources have to be re-invested* towards wider goals such as capturing the full extent of compliance costs and balancing costs and benefits in regulatory policy. This is one reason for re-directing resources from measuring administrative burdens to other dimensions of regulatory reform. It is a compelling reason because the causality leading from a reduction of burdens to a better regulatory environment is disputed (Helm, 2006). We do not know whether burdens are created by excess demand or excess supply of regulation. We often measure burdens with tools like the standard cost model which do not control for the entity and direction of measurement bias. We do not know the exact relationship between the cost of complying with a regulatory obligation and the total cost of complying with a regulation, yet for the stakeholders it is the latter that matters, not the former. Finally, to establish a causal impact on economic efficiency, burdens generated by a rule have to be balanced with the benefits that the rule also provides. But this exercise is normally not contemplated in the usages of the standard cost model we are familiar with.

There is another reason, however. Over the years the tools used by government and the activities carried out in the area of regulatory reform have increased considerably. Apart from activities, there has been a growth of regulatory oversight bodies, both inside government and with an arm's-length relation to government. To focus exclusively on the burdens in this scenario of expansion of activities and oversight structures creates a *skewed set of measures*.

Design

This brings us to the following step: *What should be included* in a system of regulatory measures? What should these indicators cover? Regulation can be examined along a causal chain going from design of institutions and tools to output and outcomes. More precisely, we distinguish the following steps in the regulatory chain of causality: *input, process, output, intermediary outcomes, final outcomes*.

In this report, we specifically looked at indicators that tap into the *three dimensions* of *input, output* and *intermediate outcomes*. The 2009 OECD report on indicators of regulatory management systems does already provide an excellent overview and discussion of *process* indicators, while *final outcomes* are the subject of a companion paper delivered by Professor Cary Coglianese.⁴

To face the challenge of tracking down the whole set of tools and structures *governments have to set priorities*. One priority is to re-direct resources from administrative burdens measures to other domains of regulatory reform. Another is to start collecting data for indicators that do not present particular difficulties in data collection, and then move on to more ambitious indicators. Yet another priority is to stage the investment of resources and political attention for regulatory quality in three phases:

- *Creating capacity* by producing information.
- *Monitoring regulatory reform* via an integrated set of measures, a sort of control panel.
- *Comparing measures* across countries and over time, thus producing convergence towards regulatory reform goals.

Composite indicators

This information, however, should not be overwhelming. Policymakers should have a control panel that provides *synthetic information about the performance of regulatory tools and oversight*. To achieve this, composite measures are a useful means. There is a vast literature on composite indicators and their

usage by governments (OECD, 2008b). In the context of this report, composite measure can be easily devised for tools like consultation and RIA.

It is customary to examine the quality of individual RIAs by using *scorecards and checklists* (Hahn, Malik and Dudley, 2004; Hahn and Dudley, 2004, especially Appendix 1, Table 1; Renda, 2006). The individual values of these checklists and scorecards can be summarised in a composite indicator of RIA quality and consultation effectiveness, for example. In the past, scorecards focused on the quality of economic analysis of RIA. Now that regulators have to handle both economic issues and distributional-rights issues (as evidenced by Tony Prosser's study on UK regulators, see Prosser, 2010) these scorecards could be adjusted to reflect the quality of analysis of distributional issues and whether rights are correctly discussed in consultation and regulatory impact assessment.

Composite indicators raise the question whether all the variables weigh the same or not. The OECD – we suggest – should make use of its working parties to *forge consensus on weights*. This is preferable to the choice of independent experts assigning weights to the individual variables of a composite indicator – the argument is dealt with at length in Radaelli and De Francesco (2007).

In short, when setting priorities, governments should follow a *coherent and balanced set of policy goals*:

- From administrative *burdens* to wider notions of regulatory *compliance costs* in order to improve on the overall regulatory environment and not only in some specific areas. In this domain, *simplification* remains a fundamental goal.
- From an emphasis on *costs* to the *benefit cost principle* to secure *effectiveness and fairness of regulation*. Effectiveness of regulation remains the overriding aim in regulatory reform. Both for *effectiveness* and *legitimacy* purposes, there is consensus on the principle that regulation should pass a quality test like ‘benefits justify the cost’ rather than quantity tests like ‘no administrative obligations cost in excess of xxx Euro’. Pluralism, access to regulation, and balanced processes of rulemaking are essential to the *fairness* of the system.
- From *objective* indicators to a set of measures including *both objective and subjective* measures. In particular, there is awareness that regulatory performance cannot be established solely by considering data and indicators produced by government: *perceptions* also matter. Reliance on perceptions measures is becoming a legitimate and popular design criterion among OECD countries. An emerging trend is about the consideration of different types of perceptions, including *perceptions of regulators* as well as the more traditional perceptions of *firms* and *citizens*. The rationale for measuring perceptions of regulators is that regulatory reform is about changing culture and attitudes of regulators; hence their beliefs shape the quality of regulation.
- From the economic dimension to *rights and distributional effects* to secure *legitimacy* of regulation.
- From a narrow concept of efficiency to a wider concept including *inter-temporal efficiency and sustainability*.
- From simple measures to *composite* indicators that capture the essential information about the performance of regulatory reform.

- From *tools* to a joint consideration of *tools and oversight* processes (integrated regulatory management).
- Finally, *transparency* of the process remains a fundamental design criterion for regulatory reform policies.

Recommending indicators

After having examined the indicators suggested by the literature and the measured adopted by governments, we have *identified a number of indicators* that look *prima facie* suitable for regulatory management. We have then described and assessed them in Tables A.1, A.2 and A.3. In the descriptive mode (Table A.1) we identify the indicator, what it measures, the underlying concept that is supposed to be captured by the indicator, data collection issues, usage, and the experience in the countries we surveyed. In the evaluative mode (Table A.2) we comment on the costs, the normative-causal assumptions behind the indicator, the level of validity and reliability (low or high), discuss other critical aspects and then make a final statement as to whether we suggest adoption of the indicator or not. Table A.3 suggests academic and policy papers reporting on the use of these indicators and point to OECD member countries that have already used those indicators. Please note that the information in Table A.3, Column 12 reflects the responses that we received on our questionnaire. No claims are made that Table A.3 is complete; instead Column 12 lists examples only.

In this report, we *discuss 21 indicators*, 18 of which we recommend for *adoption at different stages* of the regulatory reform process:

Table 1. Input indicators

Indicators	Adoption in year
01 Budget	1
02 Staff	1
03 Training	1

Table 2. Output indicators

Indicators	Adoption in year(s)
04 Forward planning	2-3
05 RIA scope	1
06 RIA extent	2-3
07 RIA quality	4 and beyond
08 RIA perception survey	4 and beyond
09 Consultation scope	1
10 Consultation extent	2-3
11 Consultation perception survey	4 and beyond
12 PIR scope	2-3
13 PIR extent	4 and beyond

Table 3. Intermediate outcomes

Adoption in year(s)	
Indicators	Adoption in year(s)
14 Number of laws	1
15 Number of pages	adoption not recommended
16 Duration of law-making process	adoption not recommended
17 Perception survey citizens/firms	4 and beyond
18 Perception survey regulators	4 and beyond

Table 4. Final outcomes

Indicators	Adoption in year(s)
19 Administrative burdens	4 and beyond
20 Total number of lives saved	4 and beyond
21 Total cost reduction	2-3

Composite indicators

Some indicators are composite measures. The *RIA composite indicator* is designed as weighted average of simple measures, which can be normalised for ease of aggregation. There are several suggestions for the individual components of this indicator in the scorecard used by Robert Hahn and his associates in the past for the US (Hahn and Dudley, 2004; Hahn and Tetlock, 2007) or, in Europe, Andrea Renda at the Centre for European Policy Studies (Renda, 2006). The authors of this report have scored some 500 RIAs in the United Kingdom using a checklist based on 93 items (Fritsch *et al.*, 2012). For ease of illustration, we suggest the following fundamental components that a RIA composite measure should include, e.g. percentages of RIAs that:

- Provide adequate problem definition;
- Set the criteria for decisions (such as cost-effectiveness);
- Consider alternative options apart from the status quo and command-and-control evaluation;
- Provide a discussion of the distribution of positive and negative effects of the regulation;
- Estimate the life-time of policy options;
- Discuss whether rights are involved and how they were addressed in rulemaking;
- Integrate the sustainability dimension in the assessment of options;
- Measure compliance costs;
- Compare/balance/commensurate costs and benefits of at least the chosen options;
- Provide an explicit ranking of options;
- Address implementation and enforcement issues providing information on how the regulation is likely to be implemented by whom and how;

- Discuss issues of uncertainty in estimates;
- Contain a section on monitoring and evaluation with specific data and information;
- Justify the absence of a review clause;
- Include a contact name or website for making contact and providing feedback;
- Identify net benefits of proposed option.

Similarly, the *composite indicator for extent of consultation* can be drawn from the literature on scorecards and regulatory checklists we have just mentioned. The fundamental components should refer to the percentage of consultations that:

- Respect the timetable set by the government in terms of duration of consultation;
- Identify the sustainability dimension of the problem, and discuss whether it is relevant or not;
- Justify the methods chosen to consult stakeholders;
- Provide evidence that stakeholders were involved in the stage of identifying alternative options and appraising them;
- Encourage a comprehensive appraisal of different alternative courses of actions by the stakeholders, including economic aspects as well as rights and sustainability;
- Show that the general public was given a possibility to provide input to the consultation;
- Show that the regulators addressed the issues raised by those who were consulted;
- Provide a summary of the results of consultation.

Tables A.1, A.2 and A.3 also contain *composite measures based on surveys*. The recent international experience shows that respondents interpret very general questions about the quality of regulation with ambiguity. The identification of the exact wording of the individual questions of surveys of citizens and firms deserves a stand-alone study, and there is already a cross-national process of reflection and learning under way (OECD, 2010). Comparability of responses to surveys in this field is still generally low, given the context-bound nature of attitudes towards regulation and the problem of distinguishing perceptions of regulation from more diffuse beliefs in the quality of government and satisfaction with democracy. Yet again, we stress that there is considerable experience among practitioners and social scientists about how to distinguish specific from diffuse beliefs. We are not starting from scratch but the issue cannot be handled in a few paragraphs of this report. With regard to measures capturing the attitudes of the regulators ambiguity is lower, but self-serving bias and the legitimate attitude to defend the choices made by elected governments can create problems. A possible way forward is not to ask blunt, general questions about the tools but about the functions and usages of the tools, for instance whether regulatory impact assessment or consultation are used to achieve one goal (such as increasing the number of opinions represented in the process) or another. Radaelli and De Francesco (2007) provide suggestions for questions to be asked to regulators.

Oversight structures

On *oversight structures*, one limitation of the indicators we suggest is that most of them are based on output or intermediate outcomes rather than final outcomes. More indicators are needed to assess the value-for-money of oversight activities. One can impossibly assess regulatory oversight bodies only in terms of how the tools are used or how much training is provided. It is vital to know if oversight creates a better regulatory environment or not. Several indicators of the quality of the environment exist, notably the *OECD Product Market Indicators* and the *Doing Business Indicators*. They all come with their pros and cons. Since the OECD has commissioned a companion paper on measuring the effects and outcomes of regulatory reform tools and institutions, we abstain from recommending one indicator or another from the set of Product Market Indicators or Doing Business. However, we wish to stress that the inclusion of at least some of the outcome indicators identified in the companion paper is a necessary complement to the set of measures needed to evaluate the performance of the regulatory oversight structure. The main challenge is to handle causality because one has to reject the hypothesis that improvements in the regulatory outcomes are not caused by factors that have nothing to do with regulatory oversight. Hence one has to control for a large number of plausible rival hypotheses.

However, both future research and policy should enhance efforts to gauge the effects of oversight on a suitable panel of sustainability indicators.

4. Usage

We distinguish *three different usages* of indicators: management, communication and accountability:

- *Management*: Central oversight bodies use indicators in order to map progress with the regulatory reform agenda and stimulate discussion with departments and regulatory agencies. Further, they alert the officers responsible for the overall regulatory reform agenda on where exactly progress is slower. Indicators that are 'actionable' point to the remedies or programme changes that would improve performance. In this report, we have focused on management indicators. On basis of our country survey, we believe that, for the time being, this is the most important type of utilisation.
- *Communication*: Regulatory quality measures may become central elements of a communication strategy at different stages of regulatory reform. The narrative of change is as important as trust in the narrator. Communication should be calibrated on key narrators and key constituencies, for example small and medium enterprises.
- *Accountability*: Actors are accountable to a variety of institutions and 'constituencies' along the chain of delegation. The most important end-users of regulatory reform are ministers, parliamentarians, and citizens. However, the literature alerts on hindrances to usage of regulatory indicators by these end users.

Integrated regulatory management

Integrated regulatory management is the most direct way of using indicators. Both the regulatory oversight body and the Minister responsible for regulatory reform should use indicators in order to further the transition towards integrated regulatory management. We stress the following implications:

In the first year, indicators should be used to *develop a baseline of regulatory reform*. Using indicators over time matters most. Across countries but even within the same government, policy makers may disagree on whether having a given indicator at the 35% level is a success or a failure. Expectations

play a key role here. What matters, however, is whether in the second year the indicator goes up to 40% or drops down to 30%.

We made a distinction between instruments, e.g. regulatory impact assessment and consultation. This enables policy makers to *monitor* where *progress* is being made and where progress is slow. As a consequence, remedies can be put in place at the level of specific instrumentations of regulatory reform.

Since indicators track down broad dimensions and different instruments, *composite measures* are useful in order to establish an overall index of performance. Similarly, the aggregation of perception measures serves to produce an overall index of satisfaction with regulation. The methodological problems are daunting, but they have not deterred researchers and governments from discussing indexes that are, from a conceptual perspective, even more complicated, for instance indexes of satisfaction with democracy and indexes of economic freedom. In a nutshell, the message is: Do not be afraid of aggregation!

Communication

Surveys help gauging the gap between results achieved by the departments and their perception among stakeholders. *Communication* should be adjusted to explain the gap, and measures can be fine-tuned over time to cross-validate objective and subjective indicators. In regulatory reform, benefits are diffuse in that the whole economy and the citizens benefit from an efficient and legitimate regulatory system. However, the cost of reform is concentrated on rent-seeking operators that can be very vocal and well-organised. An evidence-based communication based on shared indicators will over time create consensus for reform and isolate the rent-seekers. Communication should also balance targets and results across the electoral cycle and the different stages of reform.

Accountability

Regulatory indicators can be used to *enhance accountability* to the end-users of regulatory reform. Following Pollitt (2006), the end-users of reform are (in regulation as well as in other policy areas) the ministers, the parliamentarians and the citizens. Business is an obvious and very important end-user of reform programs such as the reduction of compliance costs and the war on red tape.

- *Ministers* are expected to use indicators to steer oversight process and the regulatory oversight body, for example by changing administrative law procedures such as notice and comment or “giving reasons” requirements. Ministers can also steer regulatory agencies towards medium-terms goals although the degree of independence of regulatory agencies varies by country.
- In some countries, *parliaments* are responsible for drawing up the statutes of regulatory agencies – indicators provide the basis for this long-term exercise. For example, in the US indicators enable Congress to review regulatory reform programs and agency actions. Likewise, policymakers in Denmark, Spain and Sweden use indicators in parliamentary hearings. In principle, select committees are well advised to use indicators on a routine basis, once a year. Parliamentarians, however, are less management-oriented than ministers. They are likely to pick up indicators to discuss controversial issues that public opinion brings to their attention.
- In the ideal chain of delegation, the final end-users are *citizens*. They should use indicators to judge the public value that the government has created for them.

In a review of the literature in the wider field of performance measures, Pollitt (2006, p. 48) provides a very instructive set of *caveats about accountability*. He finds that “grand statements about the importance of performance information for democracy sit alongside extensive if patchy evidence that ministers, legislators, and citizens rarely make use of the volumes of performance information now thrust upon them”. In short, usage by end-users is a tall order. We should be realistic with our expectations.

Yet there are good reasons to be *optimistic*. Institutional rules, constitutional customs, and rules of procedure that oblige parliamentary committees to respond to reports by audit offices are triggers of usage, although this can boil down to an automatic response by the committee without no real change in the programs. Reporting – Pollitt observes – keeps the officers focused on data and honesty (*ibid.*). Honesty is a pre-requisite for accountability. Finally, we should not expect that each and every report with regulatory indicators is read by all members of parliament or discussed by ordinary citizens. What matters is that the reports can be picked up by citizens, political parties and civil society organisations “when something seems to have gone seriously wrong” (*ibid.* 49). So, indicators are not typically used by citizens that police and patrol all the time, but they can be useful fire-alarms to pull when things do not seem quite right to the people.

5. Learning

These observations on end-users and accountability bring us to the fundamental point of using regulatory indicators in order to build capacity (for management but also for oversight) and to trigger learning processes. In this section, we carry on with the discussion of usage but focus on an important mode of utilisation: learning.

There is a classic trade-off between oversight and learning. In order to exercise control, governments and regulatory oversight bodies monitor the activities of regulatory agencies and departments down to inspectors and those responsible for regulatory enforcement on the ground. Taken to an extreme consequence, a focus on monitoring destroys the potential for innovation because it creates rigidity and an audit obsession with measures, paper trails and documentation. On the other hand, learning requires a regulatory management climate where officers can experiment, use information in evolutionary ways, and make mistakes in order to accept 'hard lessons' and learn from their own experience. A risk-taking attitude and experimentation are important pre-requisites for learning, but taken to an extreme, they destroy accountability and the possibility to exercise legitimate democratic control on bureaucracies. Economist Charles Sabel (1994) was the first to highlight this trade-off – a problem that is as old as organisational science.

This trade-off between learning and monitoring, however, can be eased by designing jointly the indicators and the processes in which they will be used. Countries that adopt indicators but do not design processes in which they should be used are pre-destined to failure. As we already observed, institutional rules compel specific actors (the Minister, the government, or a parliamentary committee) to respond to annual reports; often these reports contain indicators. The next step is to establish who should discuss this type of information, as well as when and where. An annual parliamentary session on the regulatory agenda of the government, similar to the annual session on the finance bill, is a strong institutional incentive to using indicators. There are no doubts that the finance bill discussion is a political priority on the institutional agenda of governments and parliaments. Equally, there is no doubt that budgetary indicators play a large role in structuring this discussion. Regulatory management indicators would most likely acquire saliency on the political agenda if countries were to move towards an annual regulatory session of the type suggested by Doern (2007). Annual regulatory sessions are arguably the highest level of domestic decision-making where regulatory management indicators should be discussed. Pollitt (2006b) has shown how some measures are used for oversight and (sort of) 'punishment' in Anglo-Saxon contexts, but very differently in Scandinavia. It follows that the institutional-political context matters in drawing the line

between oversight and cooperation. We cannot expect the regulatory session to be the same in every parliament – traditions of accountability and institutional rules will shape this session. But the essence should be the same everywhere, i.e. using indicators to set priorities for regulatory policy.

There are other possible forums for learning. Looking at the relationship between the oversight unit and the departments, indicators can be employed to structure an annual workshop of dialogue on and learning about quality. Economic regulators may have their own reflective processes, fostered by the use of common methodologies, language and measures. Regional governments may engage in benchmarking drawing on common sets of indicators. In the cooperation between different ministries in countries with strong traditions of administrative cooperation, indicators can be used to 'tell stories and explain' rather than to 'punish', pointing to some experiences where numbers can be supported by case studies. Some venues are more appropriate 'to tell stories', others 'to exercise surveillance' – the same is true for political institutions.

International organisations like the OECD and the European Commission have a key role to play in diffusing indicators internationally. They can be active agents of cross-national learning (see, for instance, De Francesco (2012) on the diffusion of regulatory impact assessment). Through the promotion of discussion, case studies and best practices, international organisations assist governments in choosing their own way in a context of convergence. Recent work by the OECD (Jacobzone *et al.*, 2010) demonstrates that there are families of countries or clusters associated with different specifications of regulatory reform. This seems to suggest that in the near future countries may learn within their cluster and proceed along patterned convergence rather than uniformity. In any case, both the OECD and the European Commission do already possess the necessary institutional infrastructure, made up of working parties and, in the case of the European Commission, high level groups. There is no need to super-impose new organisational structures to the existing ones. It is sufficient to decide to adopt a common set of indicators and agree on an annual discussion on the information provided by the indicators. At the beginning, such a common set of indicators may only be a sub-set of the management panel we suggested. As argued previously, surveys are not ideal instruments to compare cross-country, so we not expect all countries to use the same type of survey. The annual discussion may be fostered by a combination of indicators and in-depth case studies that show how some outcomes were achieved.

Equally important is to supplement indicators with matched case studies that contrast cases of success with cases of relative failure. This is a way to avoid bias generated by looking only at success cases. To illustrate, in our team we have coded 31 case studies of regulatory impact assessment from the United Kingdom and the European Commission to explore combinations of conditions that are sufficient to generate certain outcomes and usages, both desirable and undesirable. We have learned that some outcomes can be obtained by using two or three different causal paths. Indicators alone can impossibly provide this type of lesson but case studies and indicators together can clarify quite effectively.

Going back to the notions of 'telling stories' and learning, the process we suggest for international organisations is not one of competitive benchmarking and league tables. Instead, we recommend exploring together the conditions for improvement and convergence. In this vein, one step forward is to include a set of regulatory indicators in every regulatory review to be carried out in the future, in order to complement what is now essentially a peer-review method with measures of regulatory quality.

NOTES

1. Cary Coglianese (2012), “Evaluating the Performance of Regulation and Regulatory Policy”, OLIS Document (GOV/RPC/MRP(2012)4).
2. But see Cary Coglianese (2012), “Evaluating the Performance of Regulation and Regulatory Policy”, OLIS Document (GOV/RPC/MRP(2012)4).
3. Cary Coglianese (2012), “Evaluating the Performance of Regulation and Regulatory Policy”, OLIS Document (GOV/RPC/MRP(2012)4).
4. Cary Coglianese (2012), “Evaluating the Performance of Regulation and Regulatory Policy”, OLIS Document (GOV/RPC/MRP(2012)4).

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ANNEX A. APPRAISAL OF INDICATORS

Table A.1. Describing indicators

01 ID	02 Name	03 Underlying concept	04 what is measured	05 Data collection	06 Usage
Identifier of indicator	Brief name of indicator	What is the underlying concept that the indicator makes operational?	What exactly is measured through the indicator?	What kind of data is to be collected when and by whom?	For what kind of activity can the indicator be used?
Input					
01	Budget	Capacity for regulatory policy and oversight	Budget for regulatory policy and oversight at departments and agencies	When: annually. Who: regulatory oversight body, based on data provided by departments and agencies. Data: budget used for staff, services or purchases relating to regulatory policy and oversight	Management
02	Staff	Capacity for regulatory policy and oversight	Staff for regulatory policy oversight at departments and agencies	When: annually. Who: regulatory oversight body, based on data provided by departments and agencies. Data: number of FTE staff engaged in regulatory policy and oversight	Management
03	Training	Capacity for regulatory policy and oversight	Number of public officials in departments and agencies participating in training on regulatory policy and oversight	When: annually. Who: regulatory oversight body, based on records of public and private institutions offering training as well as of departments and agencies. Data: number of public officials participating in training on regulatory policy and oversight	Management
Process					
	Process indicators	See OECD 2009 for a useful overview of process indicators and their application in OECD member countries.			

01 ID	02 Name	03 Underlying concept	04 What is measured	05 Data collection	06 Usage
Output					
04	Forward planning	Capacity for forward planning	Proportion of departments and agencies publishing a forward plan for the introduction and review of primary laws and subordinate regulations to be prepared, modified, reformed or repealed	When: annually. Who: regulatory oversight body, based on data provided by departments and agencies. Data: forward plans	Accountability, management
05	RIA scope	Diffusion of RIA	Percentage of policy proposals for primary laws and subordinate regulations that are subject to RIA	When: annually. Who: regulatory oversight body, based on data provided by departments and agencies. Data: complete lists of new, modified or abandoned policies together with information on which of these policies were subject to full or, if in existence, preliminary RIA	Accountability, management
06	RIA extent	Quality of RIA	Composite indicator measuring the degree to which RIAs, for both primary laws and subordinate regulations, include key items required by RIA guidelines	When: annually. Who: regulatory oversight body. Data: scorecard informing about the presence or absence of key items required by RIA guidelines, applied on a representative sample of RIAs provided by departments and agencies	Accountability, communication, management
07	RIA quality	Quality of RIA	Composite indicator measuring the degree to which RIA documents, for both primary laws and subordinate regulations, provide satisfactory analyses of key items required by RIA guidelines	When: annually. Who: regulatory oversight body. Data: in-depth case studies of a representative sample of RIAs provided by departments and agencies	Accountability, communication, management

01 ID	02 Name	03 Underlying concept	04 What Is measured	05 Data collection	06 Usage
08	RIA perception survey	Satisfaction with RIA	Composite indicator exploring the belief in the evidence-based nature of RIA, the tool's ability to predict, participatory quality, pluralistic nature of the assessment process, ritualistic nature, biased nature	When: annually. Who: consulting firm. Data: survey based on representative sample of regulators and regulatees	Accountability, communication, management
09	Consultation scope	Diffusion of consultation	Percentage of policy proposals for primary laws and subordinate regulations subject to consultation	When: annually. Who: regulatory oversight body, based on data provided by departments and agencies. Data: complete lists of new, modified or abandoned policies together with information on which of these policies were subject to consultation	Accountability, management
10	Consultation extent	Quality of consultation	Composite indicator measuring the degree to which consultations, for both primary laws and subordinate regulations, comply with consultation guidelines	When: annually. Who: regulatory oversight body. Data: scorecard informing about the presence or absence of key items required by consultation guidelines, applied on a representative sample of consultations carried out by departments and agencies	Accountability, communication, management

01 ID	02 Name	03 Underlying concept	04 What is measured	05 Data collection	06 Usage
11	Consultation perception survey	Satisfaction with consultation	Composite indicator based on survey questions exploring consultee and regulators' satisfaction with consultation and their belief in the learning quality of consultation, i.e. participation patterns, value of consultation for regulatees, impact of consultation on policy options considered	When: annually. Who: consulting firm. Data: survey based on representative sample of regulators and regulatees	Accountability, communication, management
12	PIR scope	Diffusion of PIR	Percentage of primary laws and subordinate regulations for which a post-implementation review was carried out and can be related to the initial RIA	When: annually. Who: regulatory oversight body, based on data provided by departments and agencies. Data: complete lists of new, modified or abandoned policies together with information on which of these policies were subject to PIR	Accountability, management
13	PIR extent	Quality of PIR	Percentage of post-implementation reviews for primary laws and subordinate regulations that pass a quality standard and therefore are not perfunctory, standards reflect standards of analysis developed for RIAs	When: annually. Who: regulatory oversight body. Data: scorecard informing about the presence or absence of key items required by PIR guidelines, applied on a representative sample of PIRs provided by departments and agencies	Accountability, communication, management

01 ID	02 Name	03 Underlying concept	04 What is measured	05 Data collection	06 Usage
Intermediate outcome					
14	Number of laws	Quantity of regulation	Number of primary laws and subordinate regulations and regulations introduced in the current year	When: annually. Who: regulatory oversight body, based on data provided by Ministry of Justice, Cabinet Office and agencies. Data: number of primary laws or subordinate regulations introduced in the current year	Communication, management
15	Number of pages	Quantity of regulation	Number of pages of primary laws and subordinate regulations introduced in the current year	When: annually. Who: regulatory oversight body, based on data provided by Ministry of Justice, Cabinet Office and agencies. Data: number of pages in primary laws or subordinate regulations introduced in the current year	Communication, management
16	Duration of law-making process	Duration of law-making process	Speed of legislative process in days from tabling the bill to approval, primary laws only	There are research teams with data on duration of law making in different countries but this is not an indicator collected by governments.	Communication, management
17	Perception survey citizens and firms	Satisfaction with the regulatory system, burdens, regulations, and impact of regulation	Composite indicator based on a number of survey questions exploring the degree of unnecessary information obligations, costs related to compliance with regulations, constantly changing legislation and rules, awareness of burden reduction initiatives, and the user-friendliness of procedures	When: annually. Who: consulting firm. Data: survey based on representative sample of firms and citizens	Accountability, communication, management

01 ID	02 Name	03 Underlying concept	04 What Is measured	05 Data collection	06 Usage
18	Perception survey regulators	Satisfaction with trend in adversarial legalism, responsive nature of regulation, access to regulatory justice, and the overall complexity of regulation	Composite indicator based on a number of survey questions exploring the level of litigation, responsiveness of regulators, and access to justice to regulatees	When: annually. Who: consulting firm. Data: survey based on representative sample of regulators	Communication, management
Final outcome					
19	Administrative burdens	Burden reduction	Annual rate of reduction of administrative burdens per department and in total, absolute and in per cent	When: annually. Who: regulatory oversight body, based on information provided by department. Data: calculations provided in RIAs or Standard Cost Model	Accountability, communication, management
20	Total number of lives saved	Number of lives saved	Total number of lives saved as a result of new primary laws or subordinate regulations introduced in the current year	When: annually. Who: regulatory oversight body. Data: calculations provided in RIAs	Accountability, communication, management
21	Total cost reduction	Total cost reduction	Total net cost reduction in the current year resulting from various types of simplification activities divided by the value of the previous year	When: annually. Who: regulatory oversight body. Data: calculations provided in RIAs	Accountability, communication, management

Table A.2. Assessing indicators

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
Identifier of indicator	Brief name of indicator	What costs accrue due to data collection and measurement?	On which normative and causal assumptions does this indicator rest?	Does the indicator measure what it is supposed to measure, i.e. internal validity? Can we generalise, i.e. external validity? Would the indicator provide the same measures when used repeatedly under the same conditions with the same subjects (reliability)?	To what extent can the indicator be used for comparisons over time and across jurisdictions?	Recommended for adoption
Input						
01	Budget	Low. The data can easily be extracted from governmental or departmental budgets. Minor costs accrue through the aggregation of this data across department and agencies.	First, assumes that budget is causally related to good regulatory policy and oversight, i.e. the higher the budget the better the regulatory policy and oversight. Second, assumes that budget is an indicator of willingness to engage in regulatory policy and oversight.	Assumption 1: plausible. Assumption 2: less plausible because factors such as health of state budget and other economic constraints are disregarded. However, careful analyses can help to control for potential bias. Reliability: high, it is an unambiguous figure. Internal validity: low as the amount of budget says little about the effective and efficient use of those funds.	Comparability is high for comparisons over time but low for comparisons across countries. This is because countries vary with regard to budget available for regulatory policy and oversight.	In year 1
02	Staff	Low. The data can easily be extracted from governmental or departmental work plans. Minor costs accrue through the aggregation of this data across department and agencies.	First, assumes that more staff is causally related to good regulatory policy and oversight, i.e. the more staff the better the regulatory policy and oversight. Second, assumes that staff is an indicator of willingness to engage in regulatory policy and oversight.	Assumption 1: plausible. Assumption 2: less plausible because factors such as health of state budget and other economic constraints are disregarded. However, careful analyses can help to control for potential bias. Reliability: high, it is an unambiguous figure. Internal validity: medium, the number of staff says little about the qualification, motivation and performance of staff.	Comparability is high for comparisons over time but low for comparisons across countries. This is because countries vary with regard to budget and human resources available for regulatory policy and oversight.	In year 1

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
03	Training	Low. The data can easily be extracted from governmental or departmental work plans. Minor costs accrue through the aggregation of this data across department and agencies.	First, assumes that more training is causally related to good regulatory policy and oversight, i.e. the more training the better the regulatory policy and oversight. Second, assumes that training is an indicator of willingness to engage in regulatory policy and oversight. Third, assumes that regulator perceptions can be significantly modified by training.	Assumption 1: plausible. Assumption 2: less plausible because factors such as health of state budget and other economic constraints are disregarded. However, careful analyses can help to control for potential bias. Assumption 3: plausible although there is evidence that regulators operate in specific regulatory cultures whose core assumptions and rationales are difficult to change. Reliability: high, it is an unambiguous figure. Internal validity: medium, the extent of training says little about the effects of training.	Comparability is high for comparisons over time but low for comparisons across countries. This is because countries vary with regard to budget and human resources available for regulatory policy and oversight. Furthermore, countries differ in terms of the skills that are represented in the civil service (generalists are preferred to discipline-trained officers in countries like the UK).	In year 1

Process

Process indicators

See OECD 2009 for a useful overview of process indicators and their application in OECD member countries

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
Output						
04	Forward planning	Low. It is easy to establish whether departments and agencies use forward plans.	First, assumes that forward planning is a prerequisite for effective regulation. Second, assumes that, thanks to departmental or agency-level forward plans, government or the regulatory oversight body are able to steer the legislative and regulatory output in a way compatible with regulatory policies.	Assumption 1 collides with claims according to which regulation should be more flexible and reflexive. Assumption 2 is plausible yet there is doubt whether domestic policy making can fully be planned ahead on basis of such plans, in particular for countries which are members of a supranational organisation such as the EU. Generally, it is good to encourage departments and agencies to communicate their plans but they have to be comprehensive, transparent, and informative for policy makers to make use of them.	High on both. This indicator consists of one unambiguous figure	In years 2-3
05	RIA scope	Low. Many countries do already possess governmental or parliamentary registers that inform about past regulatory and legislative activities. Those registers, together with a repository of RIAs for primary laws and subordinate regulations, provide the basis for the measurement of this indicator	First, assumes that a RIA system is the better, the more complete and comprehensive it is, i.e. the more regulations it covers. Regulatory interventions enable or restrict individual and corporate action in a given jurisdiction and are related to societal costs and benefits. In that sense, regulation as well as non-regulation require public justification based on a careful analysis of their impacts. These analyses are provided in RIAs. This logic is undermined if regulation is only selectively subject to RIA.	While the assumption is plausible as such, it is in contradiction to calls for target-oriented analyses, i.e. to carry out RIAs only if policy proposals imply high costs or suggest severe impacts (for instance, the fact that a country does not carry out RIAs for low-impact regulations is less problematic than omissions with regard to interventions with severe impacts; hence low figures of this indicator do not necessarily indicate a weakly implemented RIA system). Further, there is a certain degree of ambiguity with regard to what types of pre-legislative analysis qualify as RIA; one minimal definition would be: all explanatory memoranda. High scores on validity and reliability.	High on both. This indicator consists of one unambiguous figure. Cross-national comparisons need, however, to keep in mind the fact that countries differ in whether they carry out RIAs for primary laws or subordinate regulations or for both.	In year 1

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
06	RIA extent	High. Scoring RIAs is a time-consuming activity, the more so the higher the number of obligatory items in the RIA guidelines, i.e. the scorecard. Further, the quality of this indicator relies to a large extent on the number of RIAs scored – the higher the better, and, if only a sample of the full universe of RIAs is assessed, on the statistical representativeness of that sample. If a high representativeness can be achieved, costs might be lower.	First, assumes that a RIA system is the better, the more complete its analyses are. Regulatory interventions enable or restrict individual and corporate action in a given jurisdiction and are related to societal costs and benefits. In that sense, regulation as well as non-regulation require public justification based on a careful analysis of their impacts. These analyses are provided in RIAs. This logic is undermined if such analyses are carried out superficially, rest on a weak data basis, employ disputed methods or omit specific tests entirely. Second, assumes that the presence of specific analyses is a satisfactory proxy for good quality of such analyses.	Assumption 1 is plausible, Assumption 2 to a lesser degree: The logic behind the scorecard approach is that, in absence of a replication of the actual analyses conducted in a RIA, information on the completeness of analyses in a RIA is a sufficient proxy for the quality of such analyses. This logic has certainly its flaws as this approach might invite ticking the boxes rather than doing high-quality analyses. Still, it is probably the best measurement which is both cost-effective and relatively internally valid. Instead, the external validity of this indicator is medium only unless oversight bodies ensure a high intercoder reliability through training sessions on how to assess the quality of a RIA, clear guidelines or, preferably, a specific team with little personnel turnover dedicated to RIA assessment. Further, there is wide disagreement whether specific interventions require a justification at all (e.g. should we care about impacts on gender relations?) or a sufficiently significance to deserve a RIA (e.g. minor secondary regulation with limited anticipated impacts). Hence, countries differ with regard to which tests and checks are obligatory at all and, even if two countries use similar RIA guidelines, might use different systems of weighing scorecard items during the calculation of a composite measure of RIA quality.	Medium on both. As long as clear definitions of scorecard items are provided, the analysis is largely replicable and therefore enables relatively reliable comparisons across years and countries. However, so far there are no universal standards when it comes to defining what a 'good' or 'complete' RIA is. Consequently, cross-country comparability suffers from different scorecards and codebooks as well as varying understandings and definitions of specific scorecard items. Further, this compound indicator relies on some form of aggregation and countries might use different approaches to weigh scorecard items. Comparability across time within a jurisdiction might suffer from changing RIA guidelines.	In years 2-3

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
07	RIA quality	High. Producing high-quality case studies is a time-consuming activity. In order to challenge the analyses carried out in a RIA, independent expertise and data are needed that come at additional costs.	First, assumes that a RIA system is the better, the more complete its analyses are. Regulatory interventions enable or restrict individual and corporate action in a given jurisdiction and are related to societal costs and benefits. In that sense, regulation as well as non-regulation require public justification based on a careful analysis of their impacts. These analyses are provided in RIAs. This logic is undermined if such analyses are carried out superficially, rest on a weak data basis, employ disputed methods or omit specific tests entirely. Second, assumes that generalists in regulatory oversight body possess the necessary expertise to challenge analyses presented in a RIA.	Assumption 1 is plausible, assumption 2 to a lesser degree but still this indicator is superior to "RIA extent": The scorecard approach (discussed for "RIA extent") only checks for the presence and absence of scorecard items, i.e. obligatory checks and analyses to be carried out in a RIA, without assessing the quality of these checks and test. This indicator attempts to assess the quality of RIA analyses as such. This approach is extremely resource-intensive (time, staff, funding) and it is questionable to what extent an independent replication, perhaps resting on new data, can actually be carried out; in particular with regard to the technical competences of officers working in oversight bodies. However, overall this is the most advanced and in-depth method to assess whether regulators comply with established RIA standards.	Low on both. In addition to the shortcomings discussed for RIA extent, there are virtually no standards what a 'good' analysis is. Due to different professional, disciplinary or theoretical backgrounds, there are different notions of 'good' analysis which are likely to prevent such standards and comparability of this indicator over time and across countries.	In year 4 and beyond

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
08	RIA perception survey	Medium. Costs accrue mainly due to the creation of a large sample size and efforts to extract a representative sample.	First, assumes a direct link between quality of RIA and regulatee perceptions, in contrast to factors such as organisational reputation or specific societal perceptions of legitimacy. Second, assumes that regulatees are willing to assess RIA independently from their desire to reduce or increase the level of regulation as such.	Assumption 1: it is dangerous to overestimate the effect of regulatory policies on perceptions held as there are various intervening factors outside the realm of domestic legislators. Assumption 2: regulators may bias their responses to defend the government policy. Measurement of perceptions is sensitive to wording, sampling issues and how the questionnaire is administered. External validity is low in the case of focus groups and higher with representative samples. Citizens may confuse their satisfaction with regulation with their overall satisfaction with the political or economic system. Measurement of perceptions is sensitive to wording, sampling issues and how the questionnaire is administered, so there might be normative issues when drafting or reading survey questions.	Low on both. Comparability across time suffers from perceptions being partly influenced by external events that can hardly be controlled by regulators. Cross-country comparisons are inadequate as beliefs and expectations depend on regulatory culture.	In year 4 and beyond

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
09	Consultation scope	Medium. Many countries do already possess governmental or parliamentary registers that inform about past regulatory and legislative activities. Those registers, together with a repository of consultations undertaken for primary laws and subordinate regulations, provide the basis for the measurement of this indicator. Producing and taking care of such a repository involves some costs, however.	First, assumes that a regulatory system is the better, the more it consults regulatees. Consultations bring in local knowledge, sectoral expertise and highlight sectoral interests to the regulatory process. This logic, as well as the ones presented in the following, is undermined if regulators consult selectively only. Second, assumes that there is no contradiction between participatory elements in regulation and more representative forms of democracy, i.e. that consultation adds legitimacy to the regulatory process either through direct contact of regulators and regulatees or because it attempts to level out uneven capacities to lobby decision makers. Third, assumes that consultation enhances implementation because new regulation is closer to regulatee interests or because regulatees are informed well in advanced about upcoming policies or because the regulatory process is perceived as fair (procedural justice).	The assumptions are plausible and have been confirmed by researchers although in cases there is a danger of regulatory capture: Stakeholders may identify options that provide rents rather than profits/efficiency. Well-balanced consultations across all societal groups and sectors compensate this. However, there is some kind of tension between public consultations and more representative forms of democracy as organised stakeholders are favoured over the general public. High scores on validity and reliability. The general call for more consultations is in contradiction to calls for target-oriented analyses, i.e. to consult only if policy proposals imply high costs or suggest severe impacts (for instance, the fact that a country does consult on low-impact regulations is less problematic than omissions with regard to interventions with severe impacts; hence low figures of this indicator do not necessarily indicate a weakly implemented consultation system). Further, there is a certain degree of ambiguity with regard to what types of involvement count as consultation.	High on both. This indicator consists of one unambiguous figure. Cross-national comparisons need, however, to keep in mind the fact that countries differ in whether they consult on primary laws or subordinate regulations or for both.	In year 1

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
10	Consultation extent	Medium. The quality of this indicator relies to a large extent on the number of consultations assessed scored – the higher the better, and, if only a sample of the full universe of consultations is assessed, on the statistical representativeness of that sample. If a high representativeness can be achieved, costs might be lower.	First, assumes that a regulatory system is the better, the more consultations comply with established standards. Consultations are assumed to provide benefits in terms of policy effectiveness, legitimacy and implementation (see assumptions and rationales discussed under “Consultation extent”). This logic is undermined if consultations are carried out superficially, unfairly, or remain without impact on the policy process.	The assumptions are plausible and have been confirmed by researchers although in cases there is a danger of regulatory capture: Stakeholders may identify options that provide rents rather than profits/efficiency. Well-balanced consultations across all societal groups and sectors compensate this. However, there is some kind of tension between public consultations and more representative forms of democracy as organised stakeholders are favoured over the general public. The scorecard approach has certainly its flaws as it might invite ticking the boxes rather than doing high-quality analyses. Still, it is probably the best measurement which is both cost-effective and relatively internally valid. Instead, the external validity of this indicator is medium only unless oversight bodies ensure a high intercoder reliability through training sessions on how to assess the quality of consultations, clear guidelines or, preferably, a specific team with little personnel turnover dedicated to assessing consultations. Number of participants does not reflect quality of participation.	Medium on both. As long as clear definitions of scorecard items are provided, the analysis is largely replicable and therefore enables relatively reliable comparisons across years and countries. However, so far there are no universal standards when it comes to defining what a 'good' consultation is. Consequently, cross-country comparability suffers from different scorecards as well as varying understandings and definitions of specific scorecard items. Further, this composite indicator relies on some form of aggregation and countries might use different approaches to weigh scorecard items. Comparability across time within a jurisdiction might suffer from changing consultation guidelines; however, this can be controlled for.	In years 2-3

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
11	Consultation perception survey	Medium. Costs accrue mainly due to the creation of a large sample size and efforts to extract a representative sample.	First, assumes a direct link between quality of consultation and regulatee perceptions, in contrast to factors such as organisational reputation or specific societal perceptions of legitimacy. Second, assumes that regulatees are willing to assess consultations independently from their desire to reduce or increase the level of regulation as such.	Assumption 1: it is dangerous to overestimate the effect of regulatory policies and perceptions held as there are various intervening factors outside the realm of domestic legislators. Assumption 2: regulators may bias their responses to defend the government policy. External validity is low in the case of focus groups and higher with representative samples. Citizens may confuse their satisfaction with regulation with their overall satisfaction with the political or economic system. Measurement of perceptions is sensitive to wording, sampling issues and how the questionnaire is administered, so there might be normative issues when drafting or reading survey questions. The fact that a firm in the sample did not participate in consultation may simply indicate that there were no regulatory changes in the firms' sector – with implications for validity and reliability.	Low on both. Comparability across time suffers from perceptions being partly influenced by external events that can hardly be controlled by regulators. Cross-country comparisons are inadequate as beliefs and expectations depend on regulatory culture.	In year 4 and beyond

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
12	PIR scope	Medium. Many countries do already possess governmental or parliamentary registers that inform about past regulatory and legislative activities. Those registers, together with a repository of RIAs and PIRs undertaken for primary laws and subordinate regulations, provide the basis for the measurement of this indicator. Producing and taking care of such a repository for PIRs involves some costs, however.	First, assumes that a PIR system is the better, the more complete and comprehensive it is, i.e. the more regulations it covers. Regulatory interventions enable or restrict individual and corporate action in a given jurisdiction and are related to societal costs and benefits. In that sense, regulation as well as non-regulation require public justification based on a careful analysis of their impacts. PIRs reanalyse the analyses provided in RIAs. This logic is undermined if regulation is only selectively subject to PIR.	While the assumption is plausible as such, it is in contradiction to calls for target-oriented analyses, i.e. to carry out PIRs only if policy proposals implied high costs or suggested severe impacts (for instance, the fact that a country does not carry out PIRs for low-impact regulations is less problematic than omissions with regard to interventions with severe impacts; hence low figures of this indicator do not necessarily indicate a weakly implemented PIR system). Further, there is a certain degree of ambiguity with regard to what types of ex-post analyses qualify as PIR. High scores on validity and reliability.	This indicator consists of one unambiguous figure. Cross-national comparisons need, however, to keep in mind the fact that countries differ in whether they carry out PIRs for primary laws or subordinate regulations or for both. Furthermore, some countries produce a lot of RIAs and some much less. If PIRs always relate to previously produced RIAs, this has implications for the number of PIRs produced.	In year 2-3

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
13	PIR extent	High. Scoring PIRs is a time-consuming activity, the more so the higher the number of checklist items. Further, the quality of this indicator relies to a large extent on the number of PIRs scored – the higher the better, and, if only a sample of the full universe of PIRs is assessed, on the statistical representativeness of that sample. If a high representativeness can be achieved, costs might be lower.	First, assumes that a PIR system is the better, the more complete its analyses are. PIRs are assumed to provide benefits in terms of policy effectiveness and policy learning from past mistakes. This logic is undermined if such analyses are carried out superficially, rest on a weak data basis, employ disputed methods or omit specific tests entirely.	Assumption 1: plausible. The logic behind the scorecard approach is that, in absence of a replication of the actual analyses conducted in a PIR, information on the completeness of analyses in a PIR is a sufficient proxy for the quality of such analyses (for a discussion, see above “RIA extent”). However, intercoder reliability is even lower than for RIAs as there are no established standards at all of what a good PIR is.	As long as clear definitions of scorecard items are provided, the analysis is largely replicable and therefore enables reliable comparisons across years and countries. However, so far there are no universal standards regarding what a 'good' or 'complete' PIR is. Consequently, cross-country comparability suffers from different scorecards and codebooks and varying understandings of specific scorecard items. Further, this indicator relies on some form of aggregation and countries might use different approaches to weigh scorecard items. Comparability across time within a jurisdiction might suffer from changing PIR guidelines. Main obstacle for comparisons: infrequent use of PIRs to date.	In year 4 and beyond

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
Intermediate outcome						
14	Number of laws	Low. Most countries produce overview documents, at least for internal use, which provide this kind of information.	First, assumes that less regulation is better than more regulation.	Assumption 1: can be challenged, many state and non-state actors believe that quality is more important than quantity. Reliability: high, unambiguous figure. Internal validity: high, assuming that one is really interested in the quantity of regulation. Further, the quantity of regulation is partly determined by supranational actors such as the EU and thus partly out of control for domestic decision makers or the regulatory oversight body.	Comparisons over time are relatively unambiguous. Cross-country comparisons, however, suffer from differences across countries to introduce new legislation through the amendment of existing bills, the introduction of new bills amending existing bills, or the introduction of secondary law to amend existing bills. Furthermore, membership in regional organisations such as the EU might have an impact on regulatory productivity that cannot be attributed to domestic decision makers.	In year 1
15	Number of pages	Low. Most countries produce overview documents on regulatory productivity, at least for internal use, which could be the basis for calculating this indicator.	First, assumes that less regulation is better than more regulation.	Assumption 1: can be challenged, many state and non-state actors believe that quality is more important than quantity. Reliability: high, unambiguous figure. Internal validity: high, assuming that one is really interested in the quantity of regulation. Further, the quantity of regulation is partly determined by supranational actors such as the EU and thus partly out of control for domestic decision makers or the regulatory oversight body.	Comparisons over time are relatively unambiguous. Cross-country comparisons suffer from variance in terms of legislative style and style of legal language. Furthermore, membership in regional organisations such as the EU might have an impact on regulatory productivity that cannot be attributed to domestic decision makers.	Not recommended

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
16	Duration of law-making process	High. Simple calculations of legislative speed are easy to make. However, reliable measurements that control for a number of external factors require a lot of contextual information and expertise that comes at high costs.	First, assumes that fast decision-making processes are better than slower ones. Second, assumes that speed of decision making is not correlated with quality of decision making.	Assumption 1: plausible. Assumption 2: contested, good law making may take time, in particular if the involvement of experts and stakeholders is required, implying that reduction of the law-making process can come at the expense of quality of regulation or limited opportunities for RIA and consultation. Furthermore, this indicator suffers from serious problems related to controlling intervening variables.	Low on both. Cross-country comparisons face considerable methodological challenges with regard to controlling for political, constitutional, and legal characteristics of a specific jurisdiction, i.e. the major differences between parliamentary versus presidential systems. Furthermore, membership in supranational organisations such as the EU introduces an additional bias as some countries are no members at all while others may want to implement fast or delay legislation for domestic reasons. Comparisons over time within one jurisdiction still face the challenge of controlling for external factors such as strength of opposition parties and changed procedural rules in legislation and regulation.	Not recommended

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
17	Perception survey citizens and firms	Medium. Costs accrue mainly due to the creation of a large sample size and efforts to extract a representative sample.	First, assumes that business interests adequately represent public interests, i.e. that the self-interest of business actors does not stand in contrast to the general interest. Second, assumes a direct link between regulatory activities and regulatee perceptions.	Assumption 1: business surveys focus on one particular stakeholder group, thereby raising normative questions related to legitimacy and representation. After all, many policies aim at benefitting a wider group of regulatees, i.e. in health, social or environmental politics. Focusing on business interest might therefore bias overall perceptions or even conflict with more general policy goals. Surveys that include citizens may compensate this. Assumption 2: one should not overestimate the effect of regulatory policies on perceptions held as there are various intervening factors outside the realm of domestic legislators. Reliability: varies, depending how representative the sample is. External validity: low in the case of focus groups and high with representative samples. Internal validity: medium, citizens may confuse their satisfaction with regulation with their overall satisfaction with the political or economic system. Measurement of perceptions is sensitive to wording, sampling issues and how the questionnaire is administered, so there might be normative issues when drafting or reading survey questions.	Comparisons over time are reliable although regulatory culture and beliefs held on regulation might change over time as well. Cross-country comparisons suffer from competing regulatory cultures (e.g. Anglo-American vs. Scandinavian style), thereby implying different perceptions of regulators when it comes to regulatory activities and reform. For example, countries with different regulatory cultures might achieve high satisfaction rates although these rates are the result of very different regulatory activities.	In year 4 and beyond

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
18	Perception survey regulators	Medium. Costs accrue mainly due to the creation of a large sample size and efforts to extract a representative sample.	First, assumes that regulators are cognitively able and willing to assess regulation, and thereby their own work, in an objective way.	Assumption 1: contested as it is likely that regulators may bias their responses to defend the government policy, their organisation or specific tools like RIA. Reliability: varies, depending how representative the sample is. External validity: low in the case of focus groups and high with representative samples. Measurement of perceptions is sensitive to wording, sampling issues and how the questionnaire is administered, so there might be normative issues when drafting or reading survey questions.	Comparisons over time are reliable although regulatory culture and beliefs held about regulation might change over time as well. Cross-country comparisons suffer from competing regulatory cultures (e.g. Anglo-American vs. Scandinavian style), thereby implying different perceptions of regulatees when it comes to regulatory activities and reform. For example, countries with different regulatory cultures might achieve high satisfaction rates although these rates are the result of very different regulatory activities.	In year 4 and beyond

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
Final outcome						
19	Administrative burdens	Medium. Costs may be low if data are extracted from the RIAs. The Standard Cost Model, however, is more cost-intensive as it involves surveys, interviews with regulatees and related tools.	First, assumes that by reducing information obligations the benefits of the regulation remain intact. Second, assumes total compliance with administrative requirements.	Assumption 1: less plausible, burden reductions can come at the expense of decreased policy effectiveness. This assumption touches upon normative issues: There is the political risk of tilting regulatory reform towards only one stakeholder, that is, the firm. Assumption 2: relies on unrealistic assumptions on compliance, thereby introducing a bias when it comes to calculating costs. Reliability: varies, depending how representative the sample is. Internal validity: varies, depending on the type of the Standard Cost Model used. Generally low as, first, point estimates are often less informative than probabilistic ranges. Second, administrative burdens are only a component of direct costs. The other important component is compliance cost. The risk is one of focusing the public debate on a limited type of regulatory costs. As such this is not a net indicator although the indicator can be improved by keeping a live baseline. Indicator 21 is more robust and contains more information. We therefore suggest "Total cost reduction" instead of this indicator.	Comparability over time is high yet the indicator is of little use in cross-country comparisons. This is because we do not control for the direction and entity of bias in individual settings and countries. However, improvements in standardisation of measurement is taking place via OECD work and the SCM international network of adopters and developers of the Standard Cost Model.	Not recommended

01 ID	02 Name	07 Costs	08 Assumptions	09 Appraisal	10 Comparability	11 Priority
20	Total number of lives saved	Low. If data are extracted from the RIAs	First, assumes that number of lives saved is an adequate indicator for effectiveness of regulation.	Assumption 1: plausible. Reliability: low, RIAs may provide less reliable data, hence PIR data may provide more leverage. Internal validity: contested, there are normative issues concerning measuring life and its value, in particular with regard to distinguishing lives, life years or quality life years. Internal and external validity: high.	Comparability over time within one jurisdiction is high as long as the same value for life measurements is used. Comparability across countries is weak: So far there are great variations of value for life measurements that impede reliable comparisons.	In year 4 and beyond
21	Total cost reduction	Low. If data are extracted from the RIAs	First, assumes that by reducing costs the benefits of the regulation remain intact. Second, assumes total compliance with regulatory or legal requirements.	Assumption 1: less plausible, cost reductions can come at the expense of decreased policy effectiveness. Assumption 2: relies on unrealistic assumptions on compliance, thereby introducing a bias when it comes to calculating costs. Reliability: low, RIAs may provide less reliable data, hence PIR data may provide more leverage. Cost reductions will have to be validated by surveys to make the claim that they are felt on the ground. Internal and external validity: high.	High on both. Very high if compared over time. Comparisons across countries are high as well although one should keep in mind that countries start at different baselines.	In year 2-3

Table A.3. Applications of indicators and references

01 ID	02 Name	12 Countries	13 References
Identifier of indicator	Brief name of indicator	Examples of countries that have already used this indicator	Where can one find more conceptual or practical information about this indicator?
Input			
01	Budget	Most EU countries	Radaelli De Francesco 2007, EVIA 2008, De Francesco <i>et al.</i> 2012
02	Staff	Most EU countries	Radaelli De Francesco 2007, EVIA 2008, De Francesco <i>et al.</i> 2012
03	Training	Italy, Ireland, Netherlands, New Zealand, Poland, Portugal, United Kingdom, United States	De Francesco <i>et al.</i> 2012
Process			
	Process indicators	See OECD 2009 for a useful overview of process indicators and their application in OECD member countries.	
Output			
04	Forward planning	Australia, New Zealand	On Australia, see Office of Best Practice Regulation 2009. For a general discussion, see Jacobs 2009.
05	RIA scope	Australia, New Zealand, Sweden	On Australia, see Office of Best Practice Regulation 2009.
06	RIA extent	Australia, New Zealand, Sweden, United Kingdom, United States	On Australia, see Office of Best Practice Regulation 2009. The United Kingdom has published assessments of RIA quality in National Audit Office 2004, 2005, 2006a, 2007a, 2009, 2010 and, more recently, in Regulatory Policy Committee 2010, 2011a, 2011b, 2012. The US assesses the impacts of new regulation with a focus on administrative burdens and economic impacts only; see Office of Management and Budget 2009, 2010, 2011. Fritsch <i>et al.</i> 2012 compare the quality of RIA in the EU and the UK. Cecot <i>et al.</i> 2008 compare the EU and the US. Hahn, Lutter and Viscusi 2000, Hahn and Tetlock 2007, and Hahn and Dudley 2004 research the quality of pre-legislative assessment in the US.

01 ID	02 Name	12 Countries	13 References
07	RIA quality	New Zealand, Sweden, United Kingdom	On New Zealand, see NZIER 2009, Legislation Advisory Committee 2008, 2010, 2011. For Sweden, see Swedish Better Regulation Council 2011. The UK has also carried out a number of case studies, see Regulatory Policy Committee 2010, 2011a, 2011b, 2012, and National Audit Office 2007a.
08	RIA perception survey	European Commission, United Kingdom	For the UK, see National Audit Office (2010). The Evaluation Partnership (2007) conducted surveys and interviews with officials at EU level. Further, Canada commissioned a similar study more than ten years ago (Regulatory Consulting Group and Delphi Group 2000).
09	Consultation scope		
10	Consultation extent	Australia, New Zealand, United Kingdom	For Australia, see Office of Best Practice Regulation 2009 and Carroll 2007. Further, the Productivity Commission (2010) calculates the numbers of stakeholder submissions received, hence providing a quantitative measure. Other countries such as the United Kingdom (National Audit Office 2007a, 2010) or New Zealand (NZIER 2009) use information provided in RIAs in order to draw conclusions about the quality of consultation.
11	Consultation perception survey		
12	PIR scope	New Zealand, United Kingdom	For the UK, see National Audit Office 2009.
13	PIR extent	United Kingdom	For the UK, see National Audit Office 2009.
Intermediate outcome			
14	Number of laws	Australia, Canada, Denmark, New Zealand, Sweden, United Kingdom	For Sweden, see Regeringskansliet 2010. In the UK, see Law Commission 2006.
15	Number of pages	United Kingdom	For the UK, see Law Commission 2006.
16	Duration of law-making process		

01 ID	02 Name	12 Countries	13 References
17	Perception survey citizens and firms	Australia, Canada, Netherlands, Spain, United Kingdom, United States	For Australia see Ipsos-Eureka 2009, for Belgium see Kegels 2010, Canada see Government of Canada 2010a, 2010b, Canadian Federation of Independent Business 2010, for the Netherlands see Deloitte 2010, Stratus 2010, ACTAL 2011, for New Zealand see Business New Zealand-KPMG 2008, for Spain see Camaras 2010, for the UK see National Audit Office 2009, MORI 2007a (survey among firms in the UK) and MORI 2007b (survey among citizens in the UK).
18	Perception survey regulators	Netherlands	For the Netherlands, see ACTAL 2011.
Final outcome			
19	Administrative burdens	Australia, Belgium, Canada, Denmark, Spain, Sweden, United Kingdom	The most comprehensive source for applications of the Standard Cost Model and measuring administrative burdens is http://www.administrative-burdens.com/ . Other studies and reports include Productivity Commission 2010 (for Australia), Government of Canada 2010a, 2010b (for Canada), Government of Denmark, Rigsrevisionen 2007 and Center for Kvalitet i ErhvervsRegulering 2010 (for Denmark), Federal Statistical Office 2006 (for Germany), Regulatory Reform Group 2008, 2010 (for the Netherlands), Norwegian Ministry of Trade and Industry 2008, National Audit Office 2008a (for the UK), Regeringskansliet 2011 (for Sweden), and OECD 2007 (in general). Likewise, many surveys listed under "Perception survey citizens and firms" relate to measuring administrative burdens.
20	Total number of lives saved		
21	Total cost reduction	United States	On the US, see Office of Management and Budget, 2009, 2010, 2011.