

# Improving Regulatory Efficiency with Readability

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## Abstract

*Impact assessment summaries are meant to provide easy-to-understand explanations to the general public. Regrettably, previous studies have shown that this is not the case. This study looks into how rational choice concepts can be used to incentivize regulators to promote readability. Literature analysis, interviews, and questionnaires, as well as a double-blind quantitative timed experiment on regulatory reading performance, were all used in this study. Data was collected to determine the relevance of summaries and key content that is essential for a regulatory audience. The study looked at how easy-to-read summaries helped regulators spend less time reading. That regulators spend an average 40% of their time reading summaries, underscores the value of summaries to regulators. When using easy-to-read versions, regulators spent 77% less time on average. This research reveals that integrating readability to impact assessment summaries saves regulators time and therefore money. As a result, there is a financial incentive to improve readability while also enhancing environmental protection.*

## I. Introduction

Until now, the argument has been made that easily understandable environmental impact assessment (EIA) summaries benefit the public. I'm here to argue that easily accessible EIA summaries benefit both the public and the regulator.

Is it difficult to read EIA summaries? At least a half-dozen studies have demonstrated the difficulty of comprehending environmental impact assessments (Gallagher and Jacobson, 1993; Sullivan et al., 1996; Möller-Lindenhof, 2018; Fischer and Fothergill, 2014; McKie and Rust, 2021; Fry et al., 2014; Maxwell, 2004; Apere, 2005).

Numerous ramifications result from this. To begin, the general public is excluded due to their inability to comprehend the EIA report and thus participate (Hartley and Wood, 2005; Wiklund, 2011). This has the effect of undermining the EIA regulation's foundation. Citizen participation is necessary for the effective enforcement of environmental impact policies because it allows for the review, scrutiny, and challenge of impact assessments (Schudson, 2015). This mechanism establishes a binding force that ensures compliance with the regulations (Bartlett, 1997; Schudson, 2015). By

excluding public review, scrutiny, and challenge, environmental protection is jeopardized (Ostrom, 2009; Wang and Wang, 2011).

Excluding the public from participating in environmental decision-making contravenes the Aarhus Convention (1998). Due to a lack of accessibility, EIA reports may be interpreted as symbolic rather than reflecting true public participation in the EIA process (Odpalik and Köppel, 2013). Furthermore, alienating the public from the EIA process fosters misunderstanding and controversy (Yao et al., 2020).

Historically, guidelines and regulations have been used to emphasize the critical importance of readability in relation to public participation's integrity. However, this method had a negligible effect on the readability of summaries (McKie and Rust, 2021).

Why is it that difficult summaries are so common?

There are a variety of reasons to simplify or complicate the text. They demonstrate how the system's existing incentive structures encourage the production of complex summary reports on a continuous basis.

It takes a long time to write simple-to-understand reports. As Blaise Pascal remarked - "I have made this one longer only because I have not had the leisure of making it shorter" (IEMA, 2011, p79). If the client refuses to pay for the service, it is likely that it will be performed quickly and thus insufficiently (Williams and Dupuy, 2016).

While proponents are likely to believe that legalese will shield them from litigation, they may be convinced otherwise (Fothergill, 2011; AASHTO, 2006). Zhang et al. (2018) demonstrated more readable public documents were found to have a positive effect on the perception of fairness and trustworthiness of the planner/developer. However, appealing to proponents who perceive the process as "difficult and slow regardless of how simplified it is" may not be the best option (Fonseca and Rodrigues, 2017: p101). Proponents view the costs of the EIA as buying the benefits of approval (Morrison-Saunders et al., 2015).

On the other hand, improved EIA summaries would undoubtedly benefit the public. Due to the public's perception of EIA participation as a time commitment, the technical nature of documents can be a significant impediment to participation (Kanu et al., 2018). Regrettably, the public has little say in whether or not it is delivered.

Meanwhile, the regulator retains significant influence over the situation (Morrison-Saunders et al., 2001). Regulators may be motivated by a desire to reduce administrative expenses and burdens on the public purse (Kimble, 2012; Victorian Law Reform Commission, 2017). They may also have concerns about EIA changes that harm the EIA process, notwithstanding their desire to reduce administrative costs (Fonseca and Rodrigues, 2017; Bond et al., 2014; Gibson, 2012). Regulators should not be afraid to return reports that do not adhere to acceptable standards. Regulators already have this capability, but it is not widely used (Ross et al., 2006).

As a consequence, this study proposes a fresh solution to the long-standing problem of enhancing EIA readability by showing the advantages to regulators.

By demonstrating the value of summaries to regulators, we speak to their self-interest. Individuals who have a direct stake in the outcome of their actions are more likely to take proactive measures. This is based on the

rational-choice theory, which is used to explain why people make decisions in their own best interests (Keohane, 2002). It lays the groundwork for a more regulator-focused justification for improving readability.

Thus, the purpose of this study was to demonstrate to the regulator that there is a compelling reason to make EIA summaries easier to read. For example, decision-makers have expressed a desire for documents that are simpler and easier to understand (AASHTO, 2006).

## II. Methods

Literature analysis, interviews, and questionnaires, as well as a double-blind quantitative timed experiment on regulatory reading performance, were all used in this study. Data was collected to determine the relevance of summaries and key content that is essential for a regulatory audience.

Experimental text was delivered in four different versions to participants in a double-blind experiment. They were divided into difficult and easy to read sections, but there was also a test of completeness. The purpose of the test was to determine whether there was any difference in accuracy or reading time under different conditions.

## III. Results

According to the research, summaries have a high level of relevance. The summary consumed 40% of the average respondent's time, ranging from 5% to 85%. This demonstrates that, despite its brevity, the summary is generating significant interest.

It is critical to use summaries correctly, and summaries will never replace reports. Appropriate proportionate use is essential. There's no expectation that the summary will be all that regulators need to see when tasked with reading the full report. This strategy falls woefully short (Rathi, 2018). This is compounded when the summary omits critical information from the original report. As such, this is not a substitute. The summary should be used in its existing context, but with an enhanced readability.

Data was gathered to determine the regulators use summaries. Due to the fact that there are a large number of people in various roles

throughout the EIA process, the summary has a variety of applications for each of them. The critical point is that, given their diverse roles and areas of expertise, they must be able to easily grasp concepts that fall outside their area of specialty.

The findings of this study indicate that regulators save time when they read concise summaries defined by the Flesch score. The Flesch score is a readability metric. A timed experiment was used to quantify the time savings. If regulators received EIA summaries in an easily-readable format, they could save approximately 77 percent (between 32 percent and 89 percent) of their time reading them. This is consistent with previous research demonstrating time savings for expert readers (Victorian Law Reform Commission, 2017).

Additionally, this study discovered that readability does not result in increased regulator satisfaction. This was determined by obtaining regulator preferences via a Likert scale and open questions. As Taylor and Riley (2017) and Hoozée et al. confirmed, readability does not improve an expert's perception of a text's credibility (2019). The preference of regulators for complicated texts may be used to justify not enforcing readability criteria.

However, easier-to-read texts may reduce satisfaction levels by exposing pre-existing logical inconsistencies or textual deficiencies. It has been established that summaries with sufficient specificity contain additional information and have a higher level of linguistic quality (Louis and Nenkova, 2011). "General sentences are insufficient on their own and require adequate support and details." (2011) (Louis and Nenkova, p.38). To satisfy the regulators' information requirements and desires, the summary must include only pertinent and specific information. When it comes to easily-read summaries, enhanced content will be a more important factor in establishing credibility with a regulatory audience.

The study aided in the development of a better understanding of regulators' information requirements and preferences for summaries. A variety of information categories were identified that regulators require and desire in summaries.

#### IV. Discussion

EIA is regularly criticized for being bureaucratic and time-consuming, particularly given certain

regulators are struggling to keep up with their workload (Rathi, 2018; Fonseca and Rodrigues 2017; Luciani, 2014). This could result in EIA reforms motivated by a desire for simplicity. This has manifested itself in Brazil through simplified procedures and information requirements, which make it easier for developers to obtain permits (Fonseca and Rodrigues, 2017). Other countries have seen comparable levels of simplification. Canada, Australia, South Africa, and the United Kingdom have all attempted reforms that impacted EIA processes adversely (Bond et al., 2014). Due to the pressures placed on regulatory agencies by EIA reforms, they may miss opportunities to intervene before irreversible damage to natural resources or social well-being occurs (Enrquez-de-Salamanca, 2021).

As an efficiency measure as well as a public health and environmental benefit, EIA summary readability should be mandated. This should undoubtedly be used before modifying the EIA policy in a negative way.

This research demonstrated how to make better use of summaries in the future, as well as how much time and effort can be saved by doing so. Readable summaries benefit regulators, the public and our environment.

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