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**EXPLORING IMPACTS OF RESPONSIVE REGULATION ON OPERATIONAL
SAFETY WITHIN THE SCOPE OF THE DEPARTMENT OF GENERAL
INSPECTORATE**

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1. INTRODUCTION

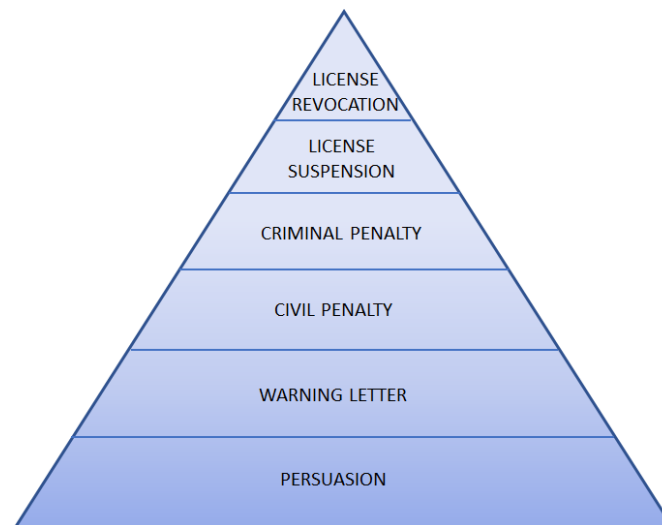
1.1. Main topic of research

Since 2016, ANAC¹ (Brazilian Civil Aviation Authority) has sought to review the administrative measures to be adopted by the Agency as a result of the exercise of inspection activities under its responsibility. The rules in force until then dealt with the administrative process for investigating infractions and applying penalties within the scope of the Agency. Resolution No. 472 (ANAC, 2018) aimed at defining new administrative measures to be adopted before effectively issuing penalties, called preventive measures, and the adoption of precautionary administrative measures.

In 2018, ANAC Resolution No. 472/2018 was published, which used the "Pyramid of Enforcement" as the basis for the Agency's inspection activities, created by Ayres & Braithwaite (1992), outlined in the figure below:

Figure 1

Enforcement Pyramid



Five gradual levels of enforcement were created at ANAC. The mildest is called ACI² (Notice of Irregular Condition), where a notification of the situation considered irregular by the operator or pilot will be sent. Then we have the SRCI³ (Remediation Request for Regular Condition), at this level, the regulated has a deadline to justify or correct the irregularity. These first two conditions are only preventive and do not have a punitive character. From the 3rd level onwards there is punishment, such as a fine, in which ANAC will charge an amount referring to the irregularity not corrected or justified in the preventive measures. If there is persistence, the licenses and authorizations granted will be suspended and, finally, the irregularity remaining in the face of all previous situations, their cancellation. Finally, in cases of imminent security risk, precautionary and immediate measures may be applied, with the detention, seizure or suspension of documents or equipment being allowed until the security levels return to a satisfactory condition. ANAC's Enforcement scheme can be better visualized on the figure bellow:

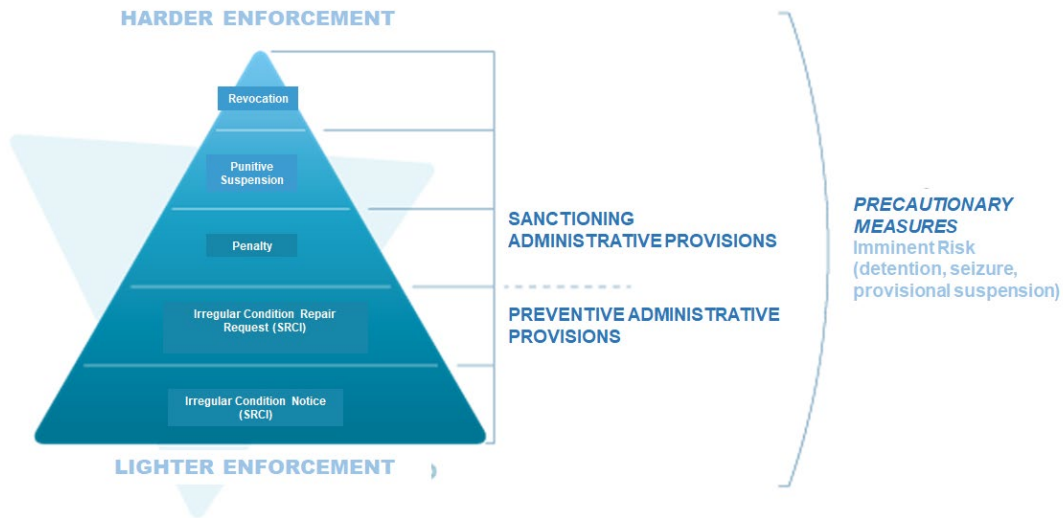
¹ ANAC – Agência Nacional de Aviação Civil (in portuguese)

² ACI – Aviso de Condição Irregular (in portuguese)

³ SRCI – Solicitação de Reparação de Condição Irregular (in portuguese)

Figure 2

ANAC's Enforcement Pyramid



1.2. Practical problem

The rules that disciplined the execution of the Agency's inspection activities were mainly based on punitive mechanisms. The logic behind this was that when a provision was established and a punishment created for its non-compliance, it was expected that the regulated would seek to comply with it in order to avoid such punishment. This approach was quite traditional and common in regulatory theory, also known as Command-and-Control strategy.

However, the role of the regulatory body was much more complex. In addition to the problems already mentioned, such a strategy proves to be very costly for the regulator and may lead to a behavior called "creative compliance with rules": in theory the rule is fulfilled, but the fact that it is fulfilled does not guarantee the achievement of the final objective of the material rule (Baldwin, Cave & Lodge, 2012).

In their book "Responsive Regulation - Transcending the Deregulation Debate", Ayres & Braithwaite (1992) highlight the need for a joint action of persuasive and punitive efforts in regulation, which enables the emergence of a compromise between the regulator and the regulated. According to Baldwin, Cave & Lodge (2012), "to reject punitive regulation is naive; to be totally committed to it is to lead a charge of the light brigade [fatal error]".

Until recently ANAC had only punitive instruments, which tended not to contribute to a cooperative behavior of the regulated, demanding costs both for them and for the Agency itself in terms of regulatory compliance and monitoring. It was concluded, then, that such instruments would not be the most adequate to guarantee, in practice, the ultimate objective of guaranteeing that the regulated followed the conducts desired by the material norms of ANAC.

Thus, it was understood as an adequate solution to this problem the definition of milder enforcement mechanisms, with a view to signaling a regulated-regulatory cooperative posture, without prejudice to

the existence of sanctioning measures and the improvement of precautionary measures, which would allow the Agency immediately apply restrictions to the regulated. These last two types would be important to guarantee the Agency's capacity to act in a more coercive way in situations where the regulated circumvented the cooperation environment.

1.3. Main objective

The objective to be pursued in this project is to study the actions developed by ANAC after the entry into force of Resolution No. 472/2018 and the practical results of this new standard in the operational safety of General Aviation. This topic is of special relevance, as it allows understanding and evaluating the effective impact of changing the approach to the regulated (compliance versus enforcement) on the controls and risk assessments for civil aviation safety.

1.4. Structure of the document

This project is organized into another three chapters. The first chapter is the introduction of our project, contextualizing the elaboration of ANAC's Resolution No. 472/2018 and posing the practical problem: has the change in the Agency's inspection approach, from compliance to enforcement, brought any changes in the behavior of the regulated companies? The second part describes the methodology used for data collection and analysis. The third part contains the results of the data collection and discussion of the results. Finally, in the last part, our conclusions and suggestions for improvements and future work.

2. METHODS

2.1. Research Design

This study combines literature review with data collection from Focus Group. The impact of Resolution No. 472/2018 is investigated so to understand if the advent of this resolution induced any significant changes in the behavior of the regulated entities under the scope of ANAC's Department of General Inspectorate – DGI⁴ (ANAC, 2021). Furthermore, the Focus Group also addresses the question on whether this change of behavior – if it is the case – in any way impacted operational security, according to the opinions and perceptions of the Focus Group.

According to Gondim (2002), the researchers find in the focus groups a technique that helps them in the investigation of beliefs, values, attitudes, opinions, and group influence processes, as well as support for the generation of hypotheses, the theoretical construction, and the elaboration of instruments. It is a technique which can be used when the analysis focus of the researcher is the group. One must be careful, however, as discussions on the use of this technique are still predominantly supported by the individual experiences of the researchers, and not by systematic studies. that could shed light on those who intend to develop and conduct focus groups.

2.2. Data collection

The Focus Group approach to this subject consists of a moderated group interview involving a small number (from four to six) of civil servants from ANAC with previous experience with regulation and who have had direct experience with Resolution No. 472/2018 and in dealing with the regulated entities subjected to it. Their reactions to specific questions are studied and their answers and considerations registered for further analysis.

The questions posed to the Focus Group and the discussions resulted from them were organized in two moments: the first moment encompassed general questions about the Resolution no. 472/2018; the second moment explored participants perceptions in its impacts. Table 1 presents the questions related to both moments.

Table 1

Focus Group questions

Moment	Questions
General questions about Resolution No. 472/2018	<ol style="list-style-type: none">1. In your opinion, how was Resolution No. 472/2018 received by regulated entities?2. How has Resolution No.472/2018 affected regulatory procedures?3. Has Resolution No.472/2018 favored a change of behavior of regulated entities? The change of behavior was positive or negative?

⁴ SFI – Superintendência de Ação Fiscal (in portuguese)

<p>Impacts of Resolution No. 472/2018 within the Scope of the Department of General Inspectorate</p>	<p>4. Do you think the preventive and precautionary measures predicted by Resolution No. 472/2018 are more effective or less effective than sanctions and fines?</p> <p>5. Regarding clandestine transport and maintenance, the main scope of DGI, do you think Resolution No. 472/2018 in any way affected the behavior of regulated entities?</p> <p>6. Do you think Resolution No. 472/2018 in any way impacted operational safety?</p> <p>7. What do you think can be improved in Resolution No.472/2018?</p>
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The answers from the Focus Group participants for each question are presented in the Appendix and summarized in Chapter 3.

2.3. Data analysis

Data obtained from the Focus Groups are discussed in relation to the literature about responsive regulation. The literature with which the data from the focus groups is compared consists mainly of technical documents from within ANAC and outside sources, as well as studies carried out by Universidade de Brasília (UnB) about responsive regulation in aviation. Since the scope of this study is the impact of the responsive regulation within the DGI scope, the studies regarding other departments exclusive attributions are not included. The results of those analyses are presented in Chapter 4.

2.4. Ethics

Regarding any ethical considerations, it is important to state that this Capstone Project is being conducted from the perspective of civil servants from the Brazilian Civil Aviation Authority. Therefore, it is only natural that the opinions and perceptions collected from the Focus Group will tend to be biased in this regard. In that sense, the opinions, and perceptions from the regulated entities themselves are not being directly taken into consideration given the nature of the participants in the Focus Groups and the scope of this project, which aims to investigate the impacts of Resolution No. 472/2018 within the scope of ANAC’s Department of General Inspectorate (DGI). The Focus Group participants consisted of members of DGI who voluntarily agreed to participate, were previously briefed about the purpose of the study, and were informed that their answers would not be identified by their names in the project report.

3. RESULTS AND DISCUSSION

Six DGI employees have participated on the Focus Group activity. They are involved with inspection and application of administrative measures. They were interviewed by the authors, and the questions listed in item 2.2 were presented to them. A synthesis of their answers depicted in Table 2 in the Appendix will be discussed below.

3.1. Question 1

The first question aimed at collecting the group's perception on how Resolution No. 472/2018 was received by the regulated subjects. Everyone understands that the resolution was well received by the regulated companies, especially by compliant ones, which benefited most from the preventive measures and had costs with fines dramatically reduced. On the other hand, non-compliant general aviation operators that act irregularly were not very receptive, considering that precautionary measures and sanctions became considerably heavier in the case of activities that represent risks to operational safety.

This focus on certain activities – in this case, those that affect operational safety – due to their level of risk is supported by the Organization for Economic Cooperation and Development (OCDE), which states that all enforcement activities should be informed by the analysis of risks. Therefore, according to OECD's "Best Practice Principles for Regulatory Policy - Regulatory Enforcement and Inspections", each activity should have their level of risk assessed so that enforcement resources could be properly allocated (OECD, 2014, p. 28).

This risk-based approach of regulation was well addressed by a study conducted by the University of Brasília (UnB) concerning responsive regulation possibilities within ANAC. According to this study, risk-based regulation does have its merits and presents itself as a viable alternative, as it ensures – when properly conducted – that "the regulatory oversight occurs in proportion to the risks, increasing the efficiency and providing greater rationality and consistency to regulation to discharge the regulator from adopting inspection measures in relation to all regulatory obligations and to treat indistinctly, in a uniform manner, all the regulated ones"(Anatel & UnB, 2020, p. 33-37).

However, despite its merits, risk-based regulation does have its setbacks. Overall, in order for a risk-based approach to be successful in its purpose, the probability of non-compliance with a given regulatory obligation should also be assessed based on propensity or compliance posture of the regulated subject, either through the analysis of its history of violation of the rules, by identifying difficulties which are inherent to the fulfillment of the obligation in question or by the profile of the regulated company, be it of simple resistance or sheer willingness to violate the regulatory framework. (Anatel & UnB, 2020, p. 33-37).

Furthermore, risk-based regulation has a tendency of concentrating resources according to previously defined priorities, often leaving out certain aspects. Therefore, regulators must clearly define their priorities beforehand, which in the long-term may pose a challenge.

3.2. Question 2

The next question was how Resolution No.472/2018 has affected ANAC's regulatory procedures. The group's perception on that question was that in general the resolution was not well received by ANAC's inspectors, as it heavily impaired inspections due to the lack of coerciveness, which seems to imply permissiveness towards irregular actions, especially in General Aviation. The Resolution responsiveness is subjected to doubt, as it would demand greater maturity from regulated subjects. The resolution affected

regulatory procedures, especially sanctioning procedures, but in a negative way, according to participants, despite presenting very important tools to deal with “irregular” regulated subjects, especially in General Aviation. The resolution supposedly promoted less efficiency in inspections, as regulated subjects started to feel like anything they did was open for negotiation, according to the participants.

This perception of permissiveness and that everything is up for negotiation is understandable, as the responsive regulation approach is considerably different from the command-and-control approach which is so rooted in ANAC’s corporate culture. However, it should be noted that this is not about “loosening” regulation. Punishment through sanctions remains a permanent regulatory strategy within the concept of responsive regulation. What responsiveness entails is that its application must reside in a subsidiary space, when non-compliance has generated negative effects on a large scale or in the event of persistent non-compliance - demonstrating that the negotiations of persuasion, induction or stimulation failed (ANATEL & UnB, 2019, p. 34).

3.3. Question 3

The Third question addressed whether there was a change in the behavior of regulated subjects resulting from Resolution No.472/2018, be it positive or negative. Overall, the group understands that ANAC has distanced itself from passengers’ needs. An example of this distancing is ANAC’s absence in airports, which was perceived as affecting ANAC’s public image. Despite not having data to support this perception, as the Regulation is new and was immediately followed by the passenger demand shortage caused by COVID-19 pandemic, the group believes that the overall impact was not positive. Although providing inspectors with better tools and measures to deal with non-compliant players, it did not have the strength necessary to effectively change their behavior. The impact among the regulated subjects was not homogeneous, as Commercial Airlines were less affected. The lack of inspectors’ training was pointed as one of the reasons of this unbalanced impact.

Concerns regarding the shift from passenger services and well-being towards general aviation are understandable, but also explainable from a risk-based regulation point of view. Although this is not necessarily the object of this study, it seems adequate that ANAC’s focus should lean towards operational safety rather than consumer rights, for example. Nonetheless, participant impressions regarding the inability of the Resolution in changing the behavior of regulated subjects despite the better tools it provided seem to be associated with the supposed lack of proper training of inspectors in adequately using the preventive, precautionary and sanction-oriented measures brought for the by the Resolution.

Corporate command-and-control culture is still very much present in the participants’ mindset, which seems to be an obstacle when it comes to responsive-oriented practices, as participants claim to feel like they “lost power” in the face of regulated subjects, which certainly contrasts with their own thoughts on how important and effective new measures and possibilities that were brought forth by the Resolution were.

3.4. Question 4

Another aspect posed for the group’s discussion was how effective were the preventive and precautionary measures predicted by Resolution No. 472/2018 comparing them with sanctions and fines. The group welcomed the preventive measures applied to cases of “lighter” infractions, those with minor impacts on aviation safety. Severe infractions, on the other hand, demand heavier sanctions, as is the case with situations that affect operational safety, which demand precautionary measures so to immediately cease the risk. It is worth remembering that the DGI’s main focus are the “irregular” regulated subjects that decidedly incur in infractions and operate outside of the parameters of the regulatory framework, thus

leading to a tendency of applying “heavier” measures and sanctions. Regulated subjects that comply with regulations were understood by participants to be treated with a more leniency when compared to regulated subjects that consistently and deliberately break the law, as the former are more prone to receiving lighter, preventive measures.

This oscillation in approach in accordance with the subject and its context is the very core of responsive regulation. Under the view of responsive theory, the best regulatory strategy to be adopted will depend on context of the case itself, such as: market context, regulatory culture and the institutional background and structure of this regulatory framework, for example. According to Braithwaite & Ayres, the idea of responsiveness is not a given formula, since “for the responsive regulator, there are no optimal or best regulatory solutions, just solutions that respond better than others to the plural configurations of support and opposition that exist at a particular moment in history”. (ANATEL & UnB, 2019, p. 33) (Ayres & Braithwaite, 1992, p. 5)

3.5. Question 5

Clandestine transport and maintenance, the main scope of the DGI, was also addressed by the group, which discussed if Resolution no. 472/2018 has somehow affected the behavior of the regulated subjects that incur in infractions of this sort. There was a consensus in the group that the behavior of the regulated subjects, especially general aviation operators, has been positively impacted, as the new Resolution brought tools that inhibit irregular practices, even though ANAC’s presence is not distributed homogeneously across the country, thus considering all the difficulties associated with this fact. Participants understand that Regulated subjects became more fearful of incurring in clandestine transport and maintenance, as punishment became more severe.

Again, this seems to be in accordance with the idea of responsiveness, as new regulatory tools (precautionary measures, for instance) have apparently tipped the scale back to an overall compliant state, especially in cases of uncertified clandestine services. Furthermore, this also enforces the fact that sanctions and fines will always be inherent to responsive regulation, albeit not as common or as necessary in a command-and-control approach, so familiar to ANAC’s corporate culture.

3.6. Question 6

The eventual impact of Resolution No. 472/2018 on operational safety was also a theme discussed by the group. Despite the lack of data after the implementing of Resolution no. 472/2018, and the demand for flying shortage resulted from the COVID-19 Pandemic, which makes difficult to evaluate in numbers, the Focus group’s perceptions are that operational safety was effectively improved, given that it is now easier to ground aircrafts that present a risk to operational safety and that could pose a threat to aviation as a whole, for example. However, it was a consensus of the group that more data should be gathered in order to effectively measure the impact of the new measures.

Regarding the apparent impact to operational safety, the impressions of the focus group seem to indicate that the advent of Resolution no. 472/2018 was an important step towards a more responsive approach, as inspectors were provided different tools to handle different scenarios, according to the nature and profile of the regulated subject and the circumstances in which the violation took place. Therefore, all things considered, the Agency seems to be headed in the right direction, since the Resolution seems to be in line with the idea of responsive regulation as it is understood by the OCDE: “the responsive regulation approach suggests that regulatory enforcement agencies should adopt a differentiated enforcement strategy based on the behavior and history of the businesses they deal with. Used properly, responsive enforcement promotes compliance more effectively, while reducing the burden posed on the

“best performing” businesses. Because businesses are informed about this policy, they have an incentive to improve their compliance and co-operate with regulatory enforcement agencies, because they know this will lead to less burdensome oversight” (OECD, 2014, p. 33).

3.7. Question 7

Lastly, the participants were asked to suggest improvements for Resolution No.472/2018. The need for data collection was unanimous, as it would help to better plan inspections, correcting eventual distortions. Care shall be also taken on implementing regulations that can undermine the positive aspects of Resolution no. 472/2018. Communication between ANAC’s Departments was also an aspect that can be improved, and inspection standards across areas shall be implemented. There should also be better concern regarding passengers. The responsive regulation aspects of the resolution should receive better procedural follow-up.

4. CONCLUSION

4.1. Final Considerations

As mentioned at the introductory part of this paper, the main objective was to study the actions developed by ANAC after the entry into force of Resolution No. 472 (ANAC, 2018) and the practical results of this new standard in the operational safety within the scope of the Department of General Inspectorate. The proposal of the new Resolution was to ensure that the regulated entities followed ANAC's rules and standards, fulfilling public interest, through the redefinition of administrative measures that could be adopted by the Agency as a result of the exercise of surveillance activities under its responsibility. It was expected that by adopting the responsive regulation approach, a more cooperative behavior would be obtained by the regulated entities.

The perceptions collected from the focus group suggest that Resolution no. 472/2018 was certainly an important step towards definitively implementing responsive regulation as a means of achieving ANAC's purpose of efficiently regulating an extremely complex market and all its intrinsic characteristics. Responsive regulations main advantage, when compared to other regulatory strategies, seems to be the fact that it promotes a more personal approach to regulation, which considers aspects such as profile, background and overall context of regulated subjects when deciding upon which type of measure is more appropriate.

The focus group raised some interesting aspects about the implementation of Resolution no. 472/2018. One of these aspects was ANAC's departure from the airports. Until recently ANAC was ostensibly present, with offices on main airports. There was a consensus in the group that the image of ANAC would have been harmed in the view of passengers, since in cases of non-compliance with current regulations there would be no one else to turn to for more immediate guidance. Another aspect on the same matter was that there are no more sanctioning possible to airlines, only preventive measures, which could somehow, on the group's perspective, lead the airlines to perceive the Agency as being more lenient towards their unruly behavior.

On the other hand, the focus group understood that the changes promoted towards clandestine transportation and maintenance were very effective in terms of promoting a safer aviation environment, as regulated entities will be keener and more cooperative to comply with rules and regulations, as cautionary measures were majored, being inspectors empowered to prevent operations whenever conditions are unsafe. Nevertheless, there is a perception that there is a lack of standardization on the inspectors' procedures between ANAC's Departments, which could weaken the agents positions on the field.

The lack of operations safety data that could effectively be correlated with the introduction of Resolution no. 472/2018, combined with the negative impacts on demand for flights from the COVID-19 pandemic, limited a better reasoned conclusion that the measures implemented effectively had the expected impact on the behavior of regulated entities. Therefore, the authors decided to opt for a qualitative approach, through a questionnaire submitted to a focus group, formed by professionals who have had contact with the new Resolution, either in the field or in the trial phase of administrative measures imposed.

Therefore, Resolution no. 472/2018, although not entirely embracing all responsive regulation's premises, does a good job in taking a necessary first step away from a simple command-and-control strategy which, for the Brazilian reality, feels outdated. In this sense, given that ANAC is bound by its legal framework and that the public sector is in constant attempts to catch up to the dynamicity of the private sector, responsive regulation seems to provide the proper balance of simplicity versus possibilities to deal with

the complex problems of an extremely complex markets, without disregarding each of the regulated entities individual characteristics.

Based on the perceptions gathered on this exploratory study, the Resolution's objective was partially achieved, as it was very effective on entities that operate underground or unruly, but somewhat lenient on regular operators, especially on airlines. It is necessary to periodically improve the Resolution and related regulations, in order to find a mid-term solution on applying responsive regulation to bring all regulated entities to a more cooperative behavior.

4.2. Suggestions for future studies

After Brazilian aviation recovers from the negative effects of COVID-19 in flight demands, a more data-based evaluation of Resolution no. 472/2018 can be performed. A larger period of data gathering would be necessary so that other influences can be isolated and eventual correlation can be detected and analyzed.

As mentioned during the focus group interview, the departure of ANAC from the airports can be the subject of future studies and reassessed. The perception that passengers and their rights were negatively affected should be verified by specific studies. The same can be done regarding inspection and follow-up of the companies, aircrafts, and the airport itself on complying with ANAC's rules and regulations.

Another subject that can be addressed soon is ANAC's coverage and influence nationwide. Has the Resolution no. 472/2018 had a uniform impact on the regulated entities of every region? Despite eventual regional differences, it would be expected that regulated entities should behave the same way in terms of complying, and the Agency should also act uniformly.

The focus group technique used in this study proved to be very effective in gathering important opinions from those directly involved with the regulated entities. It is suggested that this technique be extended throughout the agency in its regulatory processes, in order to establish more efficient and effective regulations. More detailed focus group interviews can be done for specific regions, aviation segments, and regulatory parts. The inputs from experienced participants on each subject can be a valuable source of information.

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APPENDIX

Table 2 – Focus Group answers

QUESTION	PARTICIPANT 1	PARTICIPANT 2	PARTICIPANT 3	PARTICIPANT 4	PARTICIPANT 5	PARTICIPANT 6
<p>1. In your opinion, how was Resolution No. 472/2018 received by regulated entities?</p>	<p>Resolution well received by regulated entities</p>	<p>Well received, as continuous infractions were better adjusted for regulated entities</p>	<p>Well received, as there was a considerable cost reduction by the regulated entities. ANAC turned its focus towards General Aviation with the advent of the resolution. Therefore, Commercial Air Transport (CAT) was, in a way, favored by the resolution, as it focused more on General Aviation.</p>	<p>Overall, well received. “irregular” regulated entities did not welcome the change.</p>	<p>The resolution was welcomed because it was beneficial for regulated entities.</p>	<p>“Irregular” regulated entities did not welcome the resolution. Despite the resolution, ANAC never managed to solve the effectiveness of its inspections. Resolution does not align itself with the Brazilian Air Code.</p>
<p>2. How has Resolution No.472/2018 affected regulatory procedures?</p>	<p>The resolution was not well received by ANAC inspectors, as it heavily impaired inspections due to the lack of coerciveness seems to imply</p>	<p>The resolution affected regulatory procedures, especially sanctioning procedures, but in a negative way.</p>	<p>Inspectors had a relative freedom in their actions, but the resolution proved to be a major constraint, despite it presenting very</p>	<p>The resolution impairs inspector freedom. It positively impacted Commercial Air Transport, as it proved more lenient. When it</p>	<p>Before the Resolution, inspectors had a certain flexibility, which was taken away from them with the advent of the resolution.</p>	<p>Negative impact on regulatory procedures. The resolution brought promoted less efficiency in inspections. Regulated entities</p>

	<p>permissiveness towards irregular actions, especially in General Aviation. Doubts the resolutions responsiveness, as it demands greater maturity from regulated entities.</p>		<p>important tools to lead with “irregular” regulated entities.</p>	<p>comes to General Aviation, the resolution was a very important tool for ANAC inspectors, as it created a number of ways to deal with “irregular” regulated entities, especially by terminating their certifications and authorizations.</p>	<p>There is less balance between possible measures to be adopted by inspectors.</p>	<p>started to feel like anything they did was open for negotiation.</p>
<p>3. Has Resolution No.472/2018 favored a change of behavior of regulated entities? The change of behavior was positive or negative?</p>	<p>Overall, there was a positive impact on the behavior of regulated entities, but ANAC distanced itself from passenger needs.</p>	<p>Despite not having data to support this point of view, participant believes the impact was not positive overall, despite the perception that inspections in General Aviation became more “balanced”, which proves important from a safety-oriented point of view. Argues that lack of data collection and the Pandemic heavily affect perception. “Irregular”</p>	<p>Lack of objective data is prejudicial. The resolution provided inspectors with better tools and measures to deal with non-compliant players, but it did not have enough strength to effectively change their behavior. Resolution showed more leniency towards Commercial Airlines and more severity towards General Aviation. Resolution was not effective concerning</p>	<p>Resolution certainly affected behavior. Sometimes positively, sometimes negatively. For Commercial Air Transport there was great leniency. Concerning General Aviation, it provided better tools and measures to deal with law breakers. Resolution was not positive from passenger perspective. The responsive regulations aspects</p>	<p>Passengers were heavily affected. The absence of inspectors in airports was very prejudicial not only for passengers, but also for ANAC’s public image.</p>	<p>Hard to say, as the impact was not homogenous across regulated entities. Commercial Air Transport was less affected. Lack of training of inspectors favored this unbalanced impact.</p> <p>Responsive aspects of the resolution did not account for cultural factors. Participant believes there is good intention, but there is a lot of</p>

		<p>regulated entities continue to break the law.</p> <p>The resolution was not sufficiently convincing when it comes to complying with the law. Passenger communication channels were very affected.</p>	<p>passenger rights and airport oversight.</p>	<p>of the resolution did not account for cultural factors. It strengthened sanctions, precautionary and preventive measures, but the lack of data collection of its aftermath is very prejudicial.</p>		<p>room for improvement. Believes the pandemic and lack of data collection was very prejudicial.</p>
<p>4. Do you think the preventive measures predicted by Resolution No. 472/2018 (ACI and SRCI) are more effective or less effective than sanctions and fines?</p>	<p>From the perspective of the Department of General Inspectorate, precautionary measures are very important to contain actions that impact operational safety. There should be better criteria to determine the type of measure to be applied, precautionary or sanctionable.</p>	<p>Precautionary measures are definitely more important to combat actions that affect operational safety.</p>	<p>Believes the type of measure to be applied is very relative, as it depends on the case. Light measures applied to severe cases would not affect future behavior at all. There should be balance.</p>	<p>Light infractions should not be immediately subjected to sanctions. Preventive measures such as warning are more applicable. Severe infractions, however, should demand heavy sanctions, especially when it comes to actions that affect operational safety.</p>	<p>The type of measure should depend on the severity of the action. Overall, the focus of the Department of General Inspection are the “irregular” regulated entities that decidedly incur in infractions, the tendency within the DGI is to apply “heavier” measures. “Good guys” should be treated with a more leniency when compared to regulated entities that break the law on purpose, such as</p>	<p>There is no objective way to determine which type of measure should be taken. Inspector experience should be accounted for and there should be a relative freedom of the inspector in deciding the proper measure to be taken in each case. Objectively, actions that affect operational safety should dealt with more severity.</p>

					receiving more preventive measures such as warnings. Actions that affect operational safety should be dealt with severely.	
5. Regarding clandestine transport and maintenance, the main scope of DGI, do you think Resolution No. 472/2018 in any way affected the behavior of regulated entities?	Behavior of regulated entities was certainly affected. Regulated entities became more fearful of incurring in clandestine transport and maintenance, as punishment became more severe.	Yes, because now the fines and sanctions became more adjusted to the reality. Now “irregular” players that used to decidedly broke the law now must think twice, as it is no longer worth it from a financial perspective.	Believes overall behavior improved, especially when it comes to General Aviation.	Although the resolution provided inspectors with better tools and measures to restrain these types of infractions, Inspector presence isn’t homogenous across Brazil, so effective inspection doesn’t necessarily always happen throughout the territory. The participant shows concern for newer resolutions and norms that, in his view, undermine the positive aspects of Resolution no. 472.	ANAC doesn’t have enough inspectors to guarantee that these practices are contained across the country. Believes that, despite practical limitations, there was a positive impact on the behavior of even “irregular” players, as now they show greater restraint and fearfulness.	There was positive impact when it comes to these types of practices. However, effectiveness was not necessarily improved. Furthermore, ANAC’s actions became more noticed in the media.

<p>6. Do you think Resolution No. 472/2018 in any way impacted operational safety?</p>	<p>Despite the problem of inspector presence and numbers, the Resolution certainly improved operational safety, as it provided better tools and possibilities to deal with situations that prove dangerous to operational safety.</p>	<p>Positive impact for operational safety, especially concerning General Aviation. Resolution provided much better means of dealing with these types of situations.</p>	<p>Very positive impact. Believes that improving operational safety was the resolution's main purpose.</p>	<p>Very positive impact. Believes that the resolution saved many lives as it made possible to ground aircraft in dangerous situations more easily.</p>	<p>Believes that not only operational safety improved, but also ANAC's actions in that sense gained much better visibility overall.</p>	<p>There was a positive impact to operational safety, but not in its entirety. There should be better oversight of past situations and better data collection.</p>
<p>7. What do you think can be improved in Resolution No.472/2018?</p>	<p>There should be better data collection. Some distortions concerning inspection types should be corrected. New policies that directly affect the resolution should be better thought of. Inspectors should be given more freedom.</p>	<p>Data collection should be created, and operational safety could always be improved. The resolutions created several gaps concerning inspection types that have never been subjected to further inquiry or improvement. There should be better concern for passengers. The responsive regulation aspects of the resolution</p>	<p>Better communication between ANAC's departments would greatly improve operational safety. Actions should be more homogenous across ANAC. Information available and communication with inspectors should be improved.</p>	<p>Data collection is very important. There should be an effort so that other regulations don't undermine the positive aspects of the resolution.</p>	<p>Better communication between ANAC's departments would be very beneficial. Data collection and follow-up routines would greatly improve the overall situation when it comes to operational safety.</p>	<p>Inspections should be better tailored according to the situation in order to improve effectiveness.</p>

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