

JUST & FAIR APPROACH WITHIN THE SNCF GROUP

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BACKGROUND

In 2015, SNCF launched a major safety program called PRISME (which stands for Proactive, Risks, Interfaces, Simplification, Management & Equipment) to improve its overall safety performance. In the program was included a project aimed at developing just culture within the entire SNCF group.

Indeed, SNCF made the observation that all situations impacting safety were not known due to a lack of spontaneous feedback from operational. The main reason identified was the fear of being sanctioned, which leads agents not to report their deviations, and even sometimes to hide a safety event. Therefore, SNCF tried to create a climate of trust and confidence to encourage everyone to report safety problems and thus being able to fix them.

To do this, the company chose to deploy a Just & Fair (J&F) approach. “Just” because the approach distinguishes between individual and organizational root causes of a safety event; and “Fair” because the processing of similar behaviors shall result in the same outcome.

OBJECTIVE

This paper describes the methodology used by SNCF since 2015 to deploy a just culture throughout the group and the results obtained. It also focuses on describing the recent evolutions took by SNCF to go further and anchor more deeply the approach.

1. METHODS

1.1 The approach at its origins

In 2015, SNCF decided to work on just culture within the company. For that purpose, it began by benchmarking with other companies of various industries: aviation, air force and nuclear production.

Then, a working group was formed to elaborate a Just & Fair approach with the benchmark's results. The working group drew on work done in other industries (like the EATM Just Culture Guide – 2008 or the DGAC guide about Just Culture - 2014) to carry out a methodology and tools for managers. Tools were designed to help them make the right decisions when an error or a violation is detected.

In January 2016, the methodology has been tested in 20 pilot entities. This experimentation aimed at testing the tools and validating the approach.

The 20 pilot entities unanimously validated the approach. They argued the method really helps them to treat unsafe behaviors. The experimentation also led to adjust the tools to operational needs.

Based on those positive results, SNCF decided to generalize the Just & Fair approach within the whole group. Thus, the Just & Fair booklet, as the main tool supporting the approach, has been spread in all the operational entities [Figure 1].



Figure 1. Cover of the first Just & Fair booklet (French version)

1.2 The Just & Fair Approach's principles

When a safety event or incident occurs, the Just & Fair process helps managers to analyze actors' behaviors and actions in a Just & Fair manner., i.e. by identifying and distinguishing between root causes of the event due to individual and those due to organizational system. To carry out this approach, the booklet proposes a process composed of 5 steps:

Step 1. Collect facts and analyze root causes: This first step consists in collecting as much data as possible to understand why the event occurred and identify all the factors contributing to it. This first step also aims to analyze the collected data by distinguishing the causes induced by the system (organizational factors) and those related to the actors (human factors).

Step 2. Identify the behavior or action: The goal of this step is to determine which kind of behavior or action has been made by the actors. In other words, it aims at characterizing the actions as error (i.e., unintentional action) or as deviation (i.e., voluntary action). The booklet provides various flowcharts the user may follow to achieve this step.

Step 3. Evaluate the acceptability or unacceptability of the behavior or action: Once the action has been characterized, this step let to assess its level of acceptability. The booklet proposes some useful questions. For instance: “is this safety event a source of learning for the team or the system?” or “did the operator cooperate during the investigation and analysis?”.

Step 4. Take the appropriate measures relating to the people, the team, and the system: This step consists in defining the relevant actions plan to ensure that the event does not happen again. The booklet recommends taking both individual and collective measures according to the idea that, in case of an event, the question is not “what penalty should I apply?” but rather “what actions should I take on the system and for the operators, to ensure that the event does not occur again?”.

Step 5. Feedback to all parties involved: this final step concerns the feedback needed to be made with all parties involved i.e., the operator directly involved in the event but also his team and all the actors possibly susceptible to encounter a similar situation. This last step is as important as the previous ones because trust’s building depends on the operators’ understanding of Just & Fair treatments.

Moreover, to ensure that the method is properly applied, SNCF decided to rely on a network of peer referents specially trained in Just & Fair Culture. Most of the time, those Just & Fair approach’s referents were also qualified in Human and Organizational Factors (HOF).

1.3 Recent changes

After 6 years of deployment, SNCF decided to make a state of play and collect feedback on the approach. This state of play was based on the collect of internal and external data. Internally, 2 questionnaires were distributed: one to the HOF peers’ network (144 respondents) and the other one to the entities’ high managers (491 respondents). Externally, the state of play benefited of the Safety Climate Survey spread by the European Railway Agency (ERA) in May-June 2021 (9908 respondents). The results of those different surveys were consistent and provided a good overview of Just Culture in SNCF. They also helped to identify areas of improvement.

In the middle of 2021, this overview led to define an action plan based on 4 work streams:

- Recall the purpose of the approach i.e., having a better risks awareness.
- Reinforce organizational factors analysis.
- Give some practical advice to apply the approach.
- Encourage the involvement of the HOF network.

To carry out these actions, SNCF decided to review the booklet. So, at the end of 2021, a new working group has been formed. It was composed of about 10 HOF experts and operational safety specialists. The working group’s issue was to enhance the booklet without degrading it.

The working group conducted 4 sessions spaced of approximately 15 days apart. First session was dedicated to make the inventory of the elements needed to be removed, those to be modified and those to be added. The 3 next sessions were more specially devoted to the design of the added and modified elements.

At the end of the 4 sessions, the working group led to a new version of the booklet integrated all the wished improvements.

Then, another step consisted of working on the graphic design of the content. This work resulted in a first model of the new booklet which has been sent to operational to be tested.

For 1 month, operational had the opportunity to test this new booklet and provide their feedback about it.

All feedbacks were considered and integrated to build a second model. This second model has been presented to all the companies' Safety Directors to be validated.

Finally, a last step consisted in determining the deployment method and accompanying measures.

2. RESULTS

2.1 Questionnaires and survey's results

The recent state of play showed that, since 2015, SNCF has made significant progress in the establishment of a Just Culture. First, the interne questionnaires results showed that the Just & Fair approach is widely deployed throughout the SNCF group as reported by 89% of respondents [cf. Figure 2].

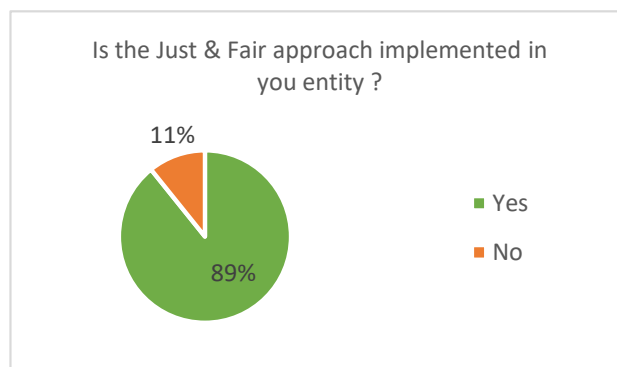


Figure 2. Results from the Managers questionnaire concerning the Just & Fair approach implementation

This result is in line with the Safety Climate Survey's score for the attribute "Reporting" of the ERA Safety Culture model. This attribute evaluates the facts that, in a company, "Routine and abnormal deviations from expected performance are recognized and reported, and "Measures to identify and mitigate organizational silence are implemented". SNCF Group obtained the average of 85% of positive perception for this attribute.

In addition, the internal questionnaires results also indicated that the booklet is quite always used (90% of respondents as shown in [Figure 3]).

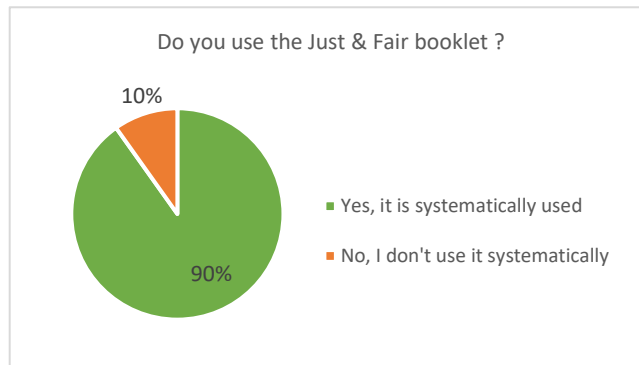


Figure 3. Results from the Managers questionnaire concerning the use of the booklet

In a general way, questionnaires and survey's results are mainly positive. Mostly respondents (79%) judge the Just & Fair approach effective to improve the global awareness of risks situations due to better feedback [cf. Figure 4].

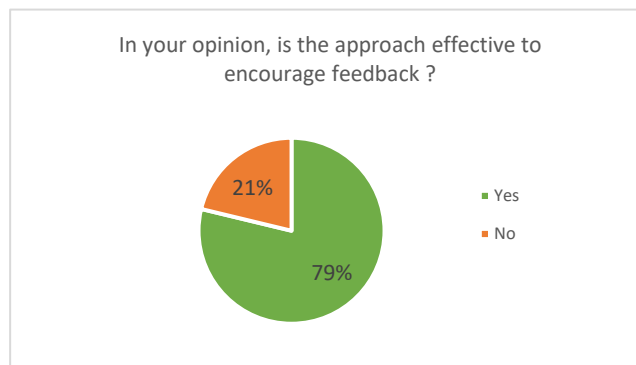


Figure 4. Results from the Managers questionnaire concerning the global effectiveness of the approach

Some verbatims also support these findings: *“Thanks to the approach, we had spontaneous feedback from operators about events that might not have been seen otherwise.”*

Results suggests that those spontaneous feedback are directly related to a greater operators' confidence in the organization, as evidenced by this verbatim: *“Operators are less afraid of penalty”*.

However, the results also highlighted some area of improvements. As Bitar and al. (2018) identified it their study, the results, within some entities, showed a “misapplication of the Just Culture process and in some cases led to outcomes not aligned with the intent”. Most of the time, this phenomenon is due to a misunderstanding of the approach's goal and/or the fact that a Just & Fair referent or a HOF expert is not systematically involved when the method is applied.

The state of play results revealed that, overtime, missions of the Just & Fair initial referents had been merged with the HOF correspondent ones. This phenomenon resulted in particular in the fact that a HOF skill does not always participate in the Just & Fair process [Cf. Figure 5].

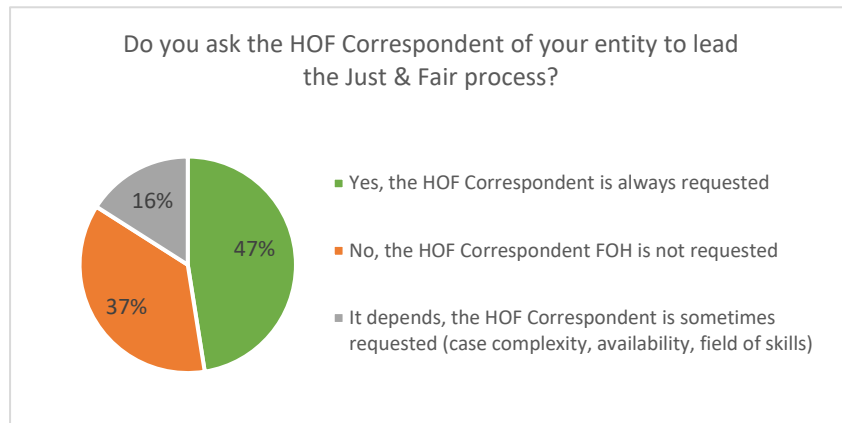


Figure 5. Results from the Managers questionnaire concerning the HOF Correspondent solicitation.

Moreover, the results underscore that mainly of the actions resulting from the Just & Fair process are not organizational [cf. Figure 6]. The outcomes of the process are still too often human-centered.

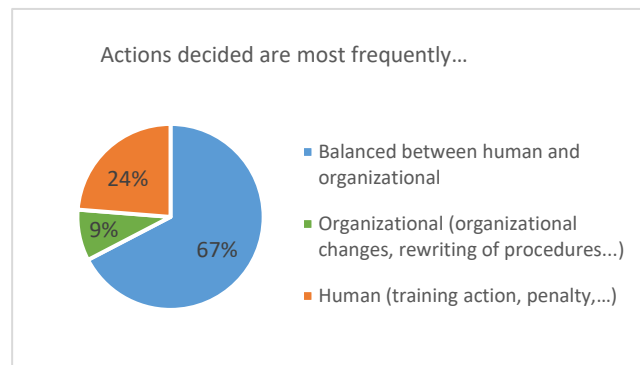


Figure 6. Results from the Managers questionnaire concerning the actions typologies

Finally, as Dekker (2016) reminds it, the Just & Fair approach must be “based on dialogue, participation and collaborative decision making”. However, some verbatims from questionnaires suggest that the process is sometimes not applied according to the Just Culture’s principles. Indeed, some verbatims from respondents express the fact that “*the operator involved doesn’t systematically participate to the Just & Fair process*”. The results also suggest that the analysis is sometimes made by a manager alone which leads to the fact that actions are not discussed nor decided collectively.

2.2 Action plan definition and implementation

Based on all these observations, SNCF decided to work on these areas of improvement by reviewing the Just & Fair booklet since it is designed to help operational staffs analyzing safety incidents by considering Human and Organizational Factors (HOF) in order to determine the actions needed to prevent a safety incident from happening again.

As mentioned above, the overview achieved in 2021 led to define an action plan based on 4 work streams:

- Recall the purpose of the approach i.e., having a better risks awareness.
- Reinforce organizational factors analysis.
- Give some practical advice to apply the approach.
- Encourage the involvement of the HOF network.

Thus, the working group has worked to integrate these aspects in the new booklet.

Therefore, the new booklet firstly contains a **new introduction to recall the goal of a Just & Fair approach**. Those details are intended to remind that the Just & Fair approach final purpose is to provide a better understanding about system strengths and weaknesses. Otherwise, the new introduction reminds that the approach aims to take the appropriate measures to avoid the recurrence of these events and thus to contribute positively to the Safety Culture. To be more concrete, the introduction includes a section that clarifies what the approach is and what it is not.

Secondly, the new booklet gives **some practical guidelines** to facilitate the concrete application of the approach. For instance, it explains when the approach may be applied, on which kind of event and who is concerned by its implementation. It also proposes a QR code linked to a website offering additional tools and describes some good practices such as *“Do not your analysis be influenced by the consequences of the event”*, because a same behavior might have various consequences depending on the context.

Thirdly, the working group focused on **reminding the important role of the HOF network** at all steps of the Just & Fair process. As part of the PRISME program, SNCF created a professionalized network of HOF referents and correspondents. Since the beginning of PRISME program in 2015, the network has grown up and is now composed of more than 200 HOF specialists dispatched into operational entities. Members of this HOF network beneficiate of a special training program carried out in partnership with the Institute of Industrial Safety Culture (ICSI). Their training is spread over more than 6 months with e-learning modules and peer-coaching, and it lasts approximately 100 hours (without counting personal efforts). These HOF specialists are in charge of supporting operational staffs in developing the human and social sciences skills throughout the company. For this reason, they have an important role to play in deploying the different steps of the Just & Fair approach.

Fourthly, an important part of the working group was to **strengthen the booklet in organizational aspects**. For this purpose, the working group has integrated organizational aspects in most of the different steps:

- In the first step to guide the data collect and analysis. This reinforcement allows managers identifying deeper, systemic issues that gave rise to the incident as recommended by Dekker (2016).
- In the third step, by evaluating the acceptability of the behavior regarding with the system (and not only the human). The implementation of a questioning to define the acceptability of the system was somewhat similar with Dekker (2012) who wonders why we blame individuals for systemic failures when we have a

collective responsibility. To support this new questioning and complete the reflection, important questions were added:

- Is the organization, the context, the situation exceptional or recurrent?
 - Does the safety event reveal a latent "trap" other actors could fall into?
 - Was it possible to work differently in this situation / context / environment / working conditions?
 - Was the safety event predictable? Could it have been anticipated or is it surprising?
 - Were the system's expectations of the people involved realistic (e.g., appropriate training, applicable procedures, available resources, staff, or time...)?
 - Were the working conditions acceptable?
 - Did the implemented organization generate significant or unconsidered risks? Or risks without protective barriers provided?
 - Could the people involved have warned, avoided, or remedied the situation?
- In the fourth step, to help identify the organizational measures to be taken to prevent the safety event from happening again. These aspects are provided by a simplified representation of James Reason's Swiss Cheese Model (Reason, 1990). So, the section devoted to this subject within the booklet describes the 4 types of barriers usually presented in James Reason's model: Context, Operational Management, Operational activity (which corresponds to individual factors) and Strategic Management. The method encourages to take organizational measures that better fix the problem and thus benefit to more people rather than individual actions. In this purpose, the method proposes to evaluate whether penalty is useful in addition to other actions and if it is the only action that permits to:
- solve the problem
 - or prevent the event from happening again,
 - or reinforce fundamentals,
 - or discourage obvious dissimulation.

The reviewing of the booklet was also an opportunity to focus on using the approach for the exemplary behavior's treatments. Indeed, as underlined by Hudson and al. (2008), the Just & Fair approaches does not care enough about positive deviations. Thus, the working group ensured that the new booklet provides the clearest way to treat this kind of situations, inviting to a better valuing of this type of behavior.

And to go even further, the new booklet also proposes to remove the term of "deviation" that focus on the non-compliance with rules. By doing this, it extends the scope to "all behaviors or actions that have had or may have an impact on safety and that are not those expected or planned". This point has been discussed and debated a lot to finally reach a consensus on the fact that remove the term of "deviation" represents a step forward in Safety Culture.

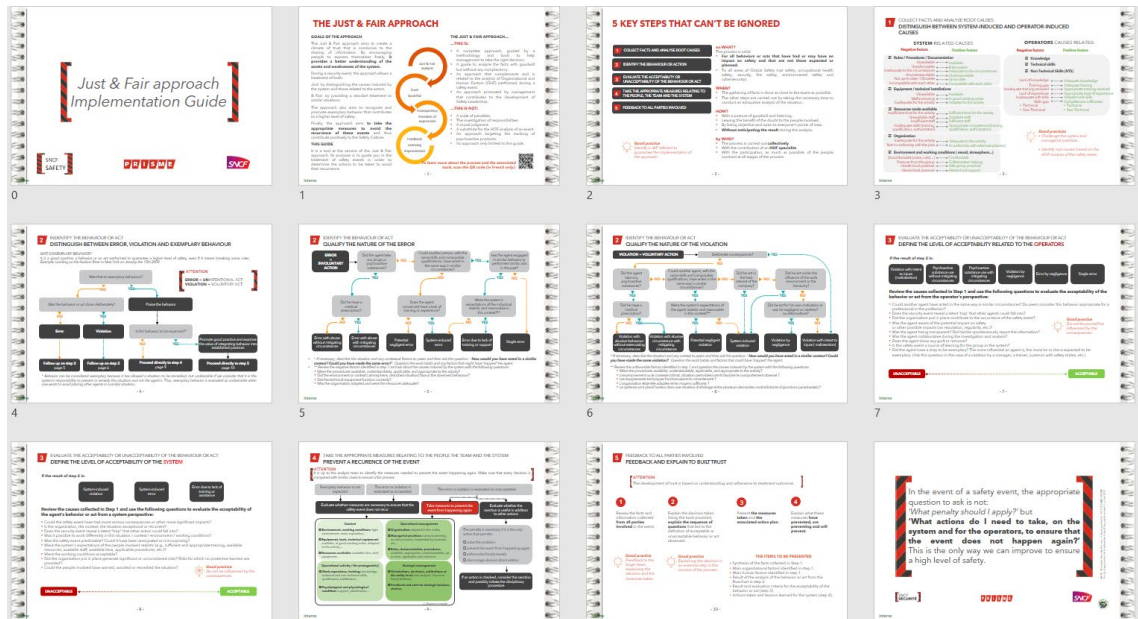


Figure 7. Template of the new Just & Fair booklet

2.3 Deployment arrangements

The working group learned from first approach’s deployment in 2015 and decided to support as far as possible the new booklet. This is why several actions were carried out:

- A short video was developed in order to explain the changes between the first and the second version.
- A 2 page comic has been created to present good practices needed to well apply the process.
- Trainings on the topic were updated.
- Each anonymous companies has defined its own communication plan to support the work done.

At last, a major Safety Convention gathering a large range of operational managers took place in September 2022. This moment was also an opportunity to present the approach.

CONCLUSION

Like suggested by Sankaranarayanan (2014), the primary aim of the SNCF’s Just & Fair approach “was to encourage and improve staff awareness on incident reporting and learning from defects, proactively identify and implement risk reduction strategies, and finally to enhance culture of safety”.

The studies conducted have shown that Just & Fair approach helps SNCF to get a better understanding of its system’s strengths and weaknesses, by allowing the operational staffs to express themselves freely and providing managers with useful and important information. Furthermore, it is an efficient method to build trust with benevolence, but without complacency.

At that point, the approach led was to build mutual trust and “anchor” a better Safety Culture in the organization.

In addition, the work carried out has made a significant contribution to enriching one of the 7 characteristics of the SNCF's Safety Culture model.

However, the state of play results showed an heterogeneous level of maturity between the different operational entities. For example, some companies of the group have decided to write a charter to encourage the freedom to speak. Such a charter is useful to avoid the effect mentioned by Direstu (2019): "the implementation of just culture according to the organization's commitment is not stated clearly in safety policy statement and have not been promoted to all employee". Nevertheless, all companies do not have such a charter. Thus, in the future, the challenge will be to spread and support the Just & Fair approach within all the entities to obtain a more homogeneous level of Safety Culture maturity.

At last, as written by Langard (2010), SNCF will have to be attentive to keep the process alive and continue to feed it.

Keywords: Just Culture; Just & Fair approach; Safety Culture; freedom of speech

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