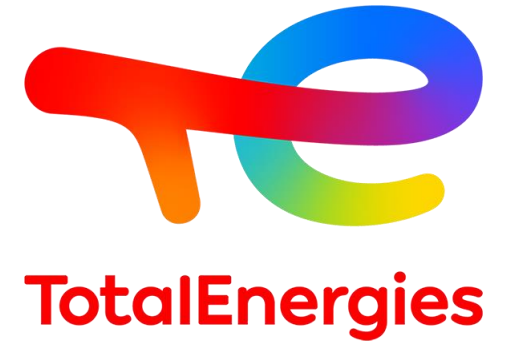




INTEGRATED SAFETY CULTURE

A focus on human factors affecting safety performance
incl.fatigue management

BACKGROUND| Perfect transport campaign



- Road transport is one of the top risk activities for the industry
- Driver's behavior is considered as immediate cause in 65% of serious road transport accidents.
- So far, initiatives mainly focused on rules enforcement as well as technical safety barriers (i.e obc, anti fatigue cameras, etc).



Now the use of human factors program to enhance safety on the road is the main focus area



The H.O.F. Approach
Human and organizational factors for safety



GM-GR-HSE-350 / September 2021

Pilot sites: Burkina, EQ Guinea, India

- Understand the context, working environment and motivation of the drivers.
- Identify the conditions that influence driver's HSE performance on the road.
- Focus on work as done, not as imagined.
- Improve the system in which drivers operate, not to blame individuals.



What challenges do drivers face on the road

- Road conditions
- Behavior of third parties etc

What makes up satisfaction of drivers over above incentives

- A sense of accomplishment
- Family and a sense of belonging
- Home responsibilities

SOME LESSONS FROM PILOT AFFILIATES

Some lessons from other affiliates

- Organize workshops with drivers in the presence of a psychologist.
- Train counselors in Human Factors to improve their influence on drivers.
- Set up checkpoints to monitor the physical condition of drivers.
- Make drivers aware of sources of distraction and ways to manage them.
- Visit local transporter.
- Invite family members to recognition rituals.



IDENTIFYING THE FACTORS THAT SHAPE DRIVER'S HSE PERFORMANCE

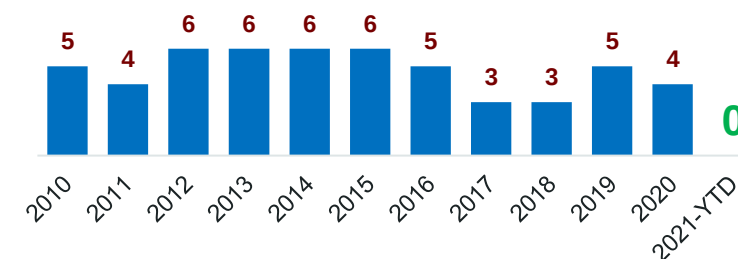
BEFORE



AFTER



SVAR events evolution

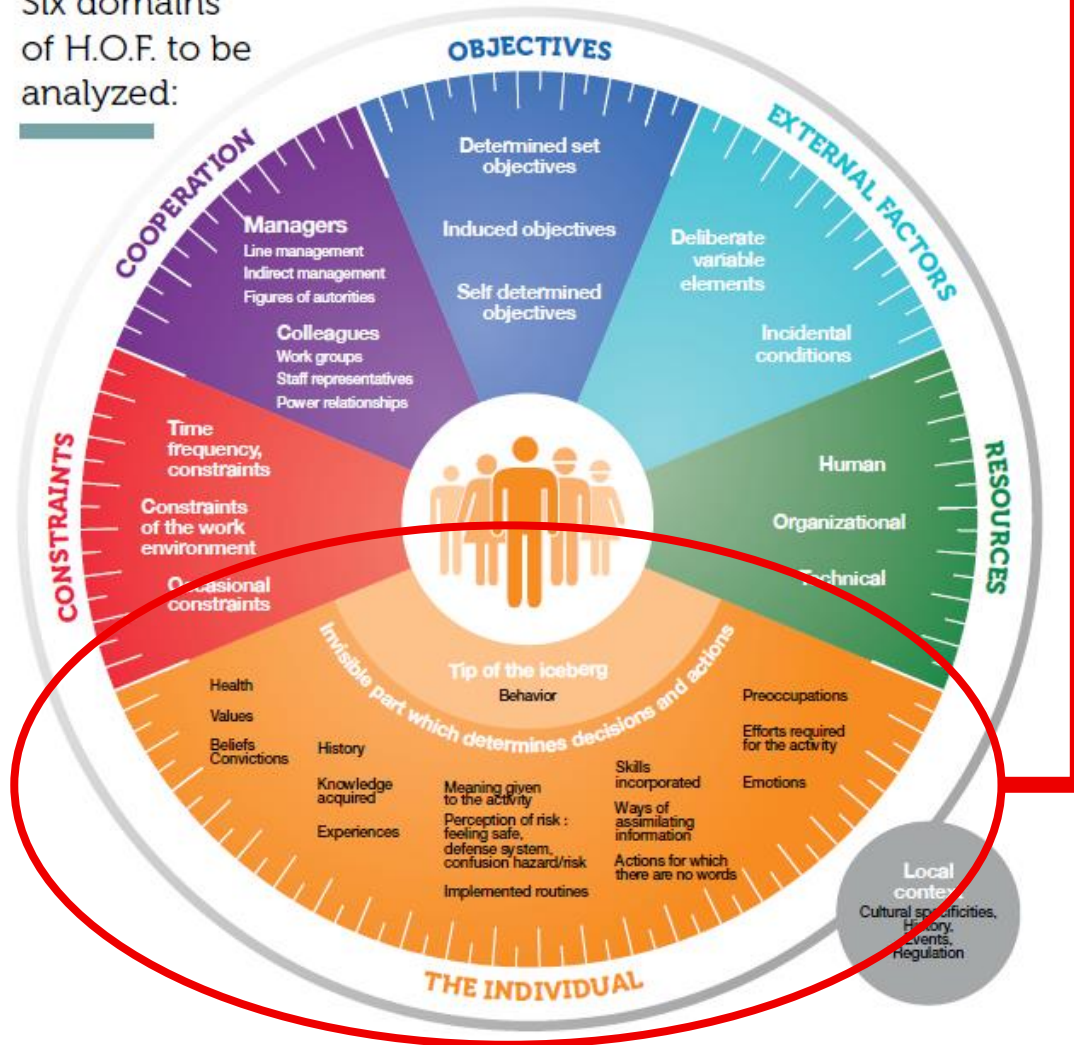


- HOF oriented analysis of 2019-2020 accidents.
- Evolution of Affiliate local driving rules.
- Implementation of Perfect Driver actions.

Guinea success - 16 MONTHS WITHOUT A SVAR EVENT

TMSA METHODOLOGY

Six domains of H.O.F. to be analyzed:



TMSA Human factors Study



- Study conducted to better understand the causes of concerning incidents.
- The study identified several areas of improvement for further investigation.
- In September 2021, The Company Released: Approaches for an Integrated Safety Culture

Focus will be all areas of the business beyond transport

6. The Individual

The Individual at the heart of the situation, his/her characteristics, ways of working, thinking and acting.

Each individual is different (age, right-handed, left-handed) depending on their history, career path, in constantly evolving conditions.

► Health

E.G.: *Fatigue, stress, medical treatment in progress.*

► Values

E.G.: *Safety at all times / Mutual support.*

► Beliefs

E.G.: *"Any accident on site can be avoided" or on the contrary : "Not all accidents on site can be avoided".*

► History

E.G.: *Individual path over the last five years.*

► Acquired Knowledge

E.G.: *Technical knowledge acquired through courses, on-the-job training.*

► Experiences

E.G.: *Experience of specific situations.*

► Sense making into the activity

E.G.: *An individual prefers doing a task in their own way as they consider the job will be well done using this method.*

► Perception of risks, feeling safe, defense system, confusion between hazard and risk

E.G.: *Perception related to H2S risk (forever present in the daily task), risk underestimated by players.*

► Implemented Routines

E.G.: *Thought reflexes / action reflexes / usual actions.*

► Skills incorporated

E.G.: *Capacity to predict machine failure based on noises or vibrations.*

► Way of assimilating information

E.G.: *Reactions to alarms, monitored parameters, understanding of signals received.*

USE THE 6 HOF DOMAINS TO ANALYZE NORMAL WORK

Process to be followed



Sub projects to address specific areas of concern

- Organizational factors impeding on integrated safety culture
- Fatigue management for shift workers
- Typical day of an operator /shift worker beyond the workplace when compared with a normal office person
- Operator Mental health

- To what degree are current systems, rules, procedures, processes taking these into account
- Equip Managers with Human factors affecting safety and performance in general

Participative Workshops

Workshop 1

Workshop 2

Address the perception of blame and poor focus on systemic issues

- Not enough focus personal factors – country specific societal issues
- There is a blame culture
- There are only negative consequences when you are involved in an incident
- Current root causes analysis targets individual's behaviours or equipment failure and not systemic root causes**
- The incident investigation process is not transparent
- There is minimal learning about systemic contributory factors

Building on current compliance

- Safety resides in specific HSE roles
- Senior management don't often engage with and listen to employees
- Reporting near misses and safety concerns does not result in safety Improvement
- Very little feedback is provided about safe behaviour and performance
- Safety can be a burden and unnecessarily hinders productivity

