

Safety culture assessment

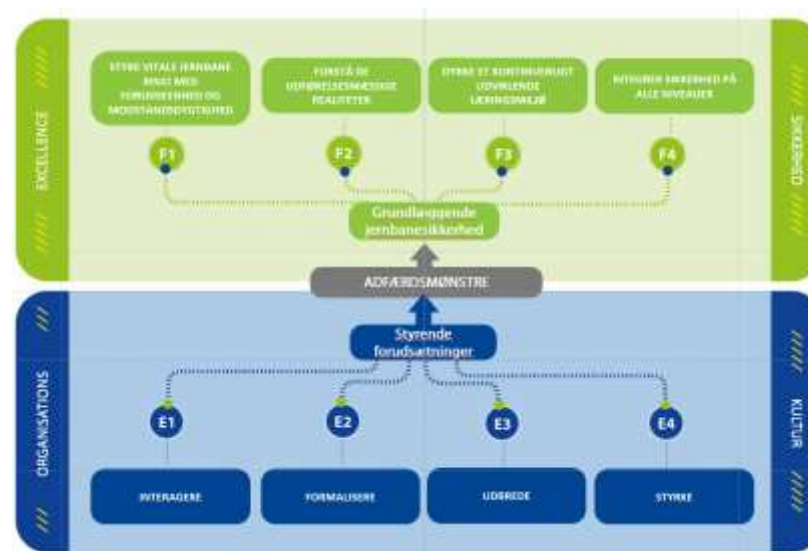
IPA safety summit, Belgrade November 2019

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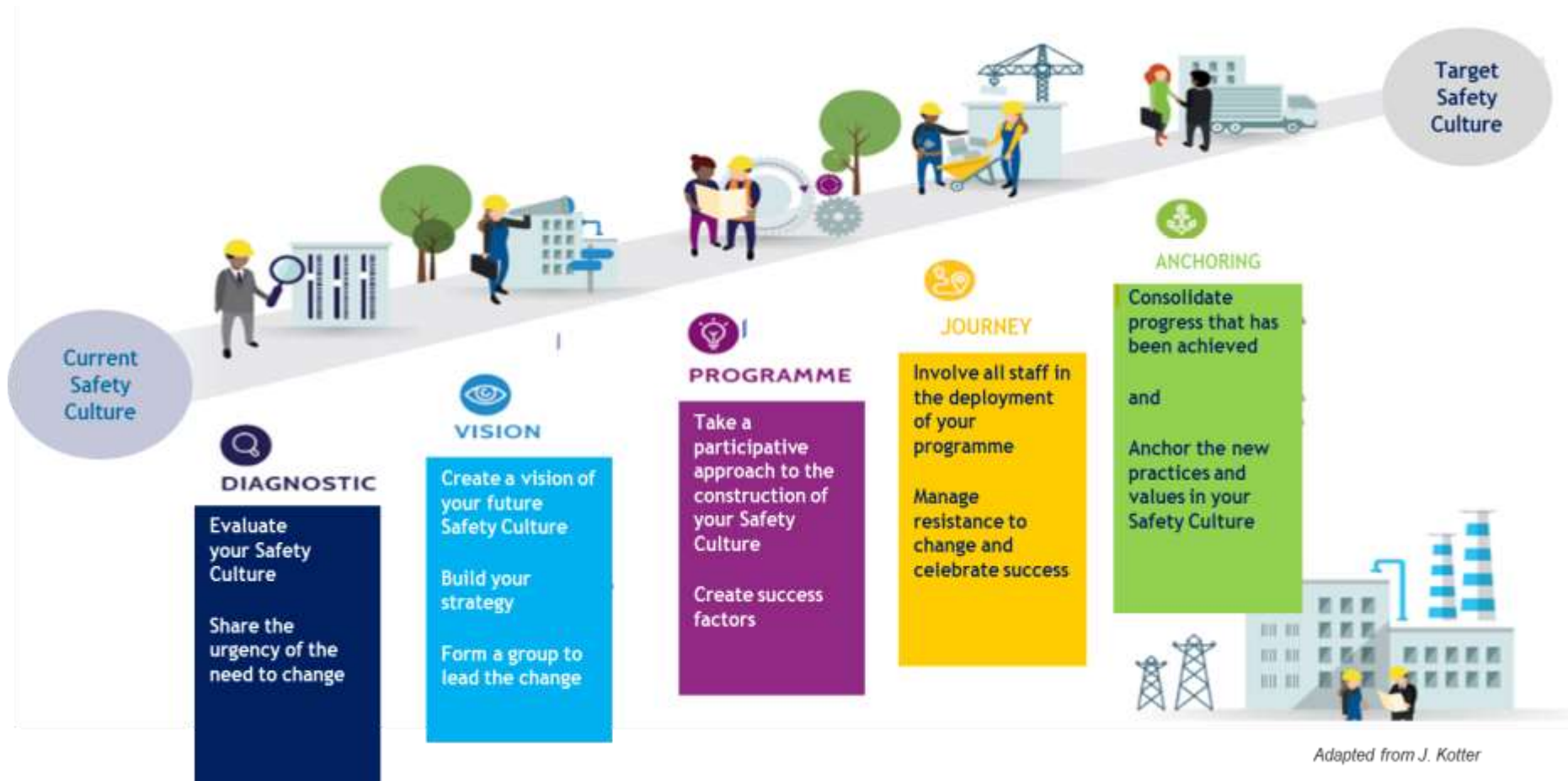
To produce an assessment “toolkit” for the industry based on the European SC Model

- NJ assessment – a pilot to have learnings and feedback for improvements
 - Besides NJ model is tested by NSA Finland and Switzerland









Assessment Process

A Method for Leading Safety Culture Change (ICSI)



There is no magical recipe model for action, only a model adapted to your own context

Safety Culture Assessment Process

Preparation Feb-Apr 19	Kick-off & training 15-16 April 19	Survey and analysis March-May 19	Focus groups and immediate feedback 26 June-3 July	Formal feedback July-August 19	Action plan and program Seminars Sept 19
<ul style="list-style-type: none"> - Preparation meetings - Internal organisation at NJ - Translation of the European Railway Safety Culture Model - Translation of questionnaire questions 	<ul style="list-style-type: none"> - Kick off meeting - Local project team training - Survey dummy run on local project team - Meetings with project lead and EXCOM - Immersions on the field 	<ul style="list-style-type: none"> - Preparation for the questionnaire - NJ questionnaire 6-13 May <ul style="list-style-type: none"> • specific fill in times for the best result • Min 80 % is needed for a valid result - Analyses and preparation of focus groups, interviews, observations 	<ul style="list-style-type: none"> - Opening meeting - Document review (partially performed) - 7 Focus groups, with a total of 24 people - 5 Observations and interviews with a total of 8 people - Closing meeting and feedback to EXCOM - Full survey on NJ safety culture handover 	<ul style="list-style-type: none"> - Follow up with NJ by phone – when? - Feedback from NJ on the process and results <p>Suggestions for NJ:</p> <ul style="list-style-type: none"> - (NJ vision seminar?) - Survey feedback to staff 	<p>Suggestions for NJ:</p> <ul style="list-style-type: none"> - Workgroup to define safety culture action plan and ToR - Project/programme seminar with EXCOM - Information to staff
					
					

Questionnaire results

Nombre d'enregistrement(s) pour cette requête : 87
 Nombre total d'enregistrements pour ce questionnaire : 87 87/119=73%
 Pourcentage du total : 100.00%

Number of answers, to the low side, but OK

Hvad er dit primære jobansvar ?

Réponse	Décompte	Pourcentage
Ledelsesgruppen (L001)	9	10.34%
Trafikstyring (L002)	6	6.90%
Togservice/Økonomi (L003)	9	10.34%
Banemontør (L004)	6	6.90%
Værkstedstekniker (L005)	9	10.34%
Lokomotivfører (L006)	48	55.17%

Very low number categories, especially "Banemontør"

Hvor mange år har du arbejdet hos NJ ?

Réponse	Décompte	Pourcentage
1 - 2 år (L001)	47	54.02%
3 - 5 år (L002)	21	24.14%
6 - 10 år (L003)	6	6.90%
> 10 år (L004)	13	14.94%

Very high percentage of "newcomers"

Hvor mange år har du arbejdet i jernbane sektoren ?

Réponse	Décompte	Pourcentage
1 - 2 år (L001)	20	22.99%
3 - 5 år (L002)	10	11.49%
6 - 10 år (L003)	7	8.05%
> 10 år (L004)	50	57.47%

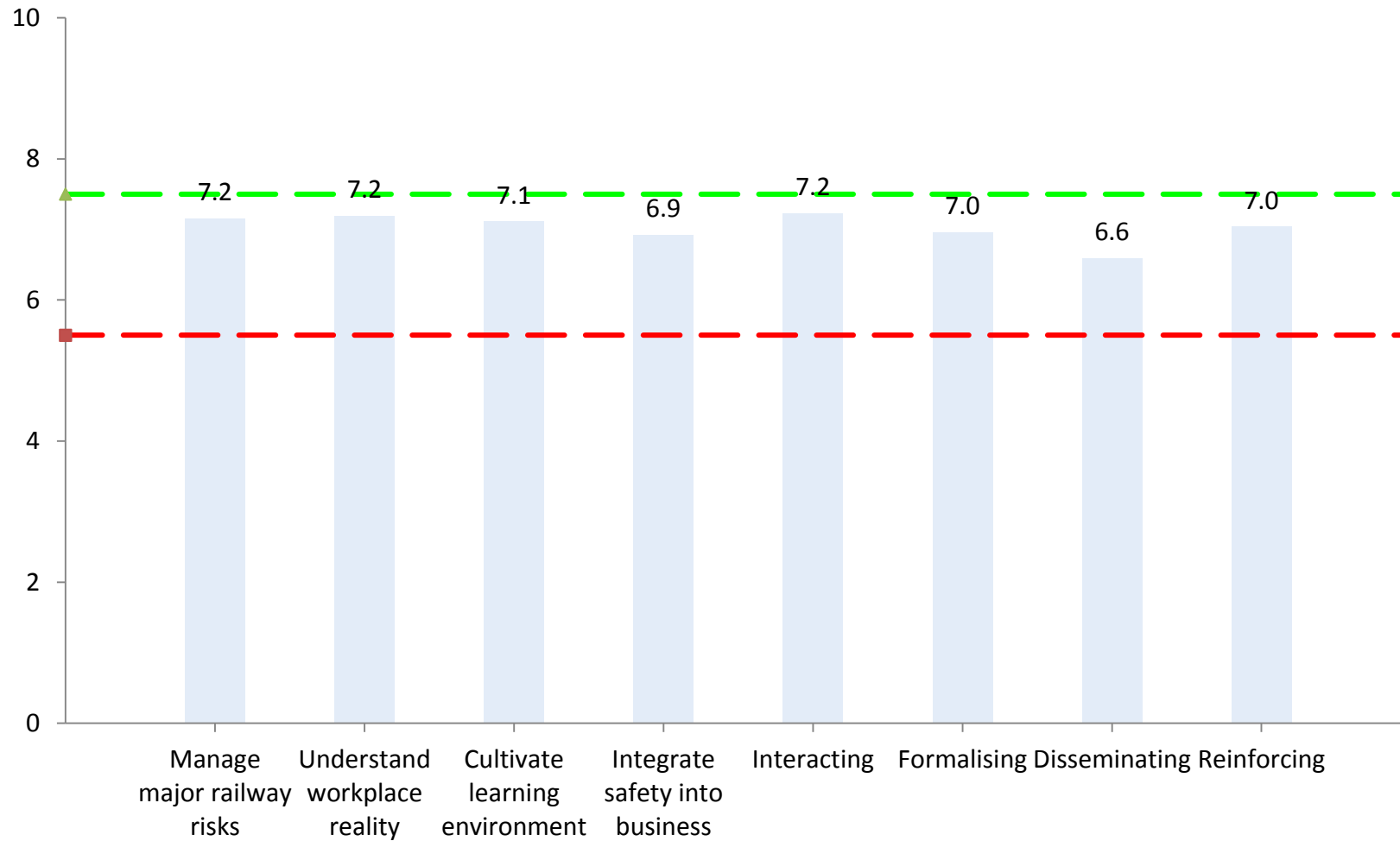
Har du tidligere deltaget i en sikkerhedskultur undersøgelse hos NJ ?

Réponse	Décompte	Pourcentage
Ja (L001)	16	18.39%
Nej (L002)	71	81.61%

Reading grid

- Index > 7,5 → Strength
- 6,5 < Index < 7,5 → Medium
- 5,5 < Index < 6,5 → Drag
- Index < 5,5 → Weakness

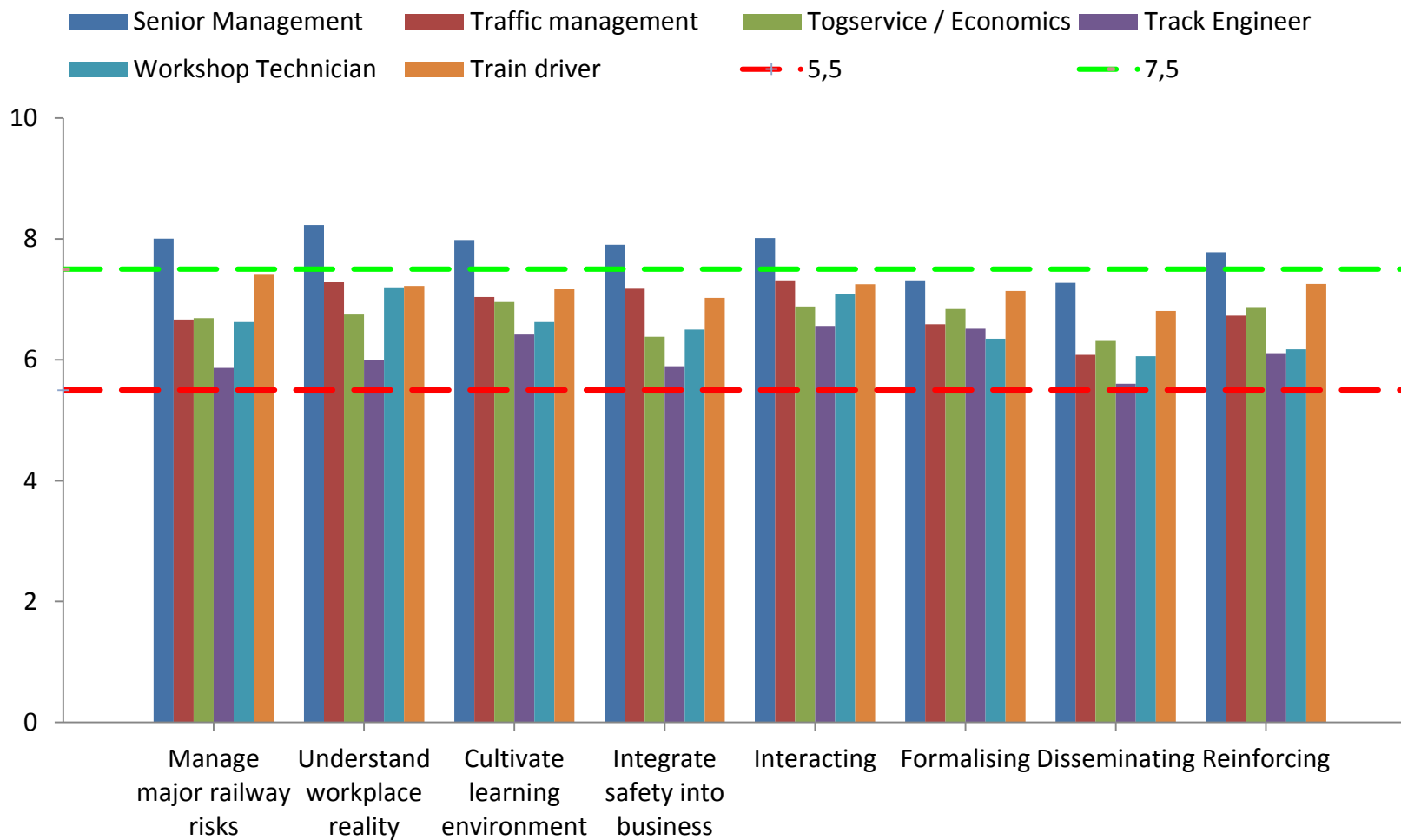
Perceptions : global results per theme



Reading grid

Index > 7,5 → **Strenght**
 6,5 < Index < 7,5 → **Medium**
 5,5 < Index < 6,5 → **Drag**
 Index < 5,5 → **Weakness**

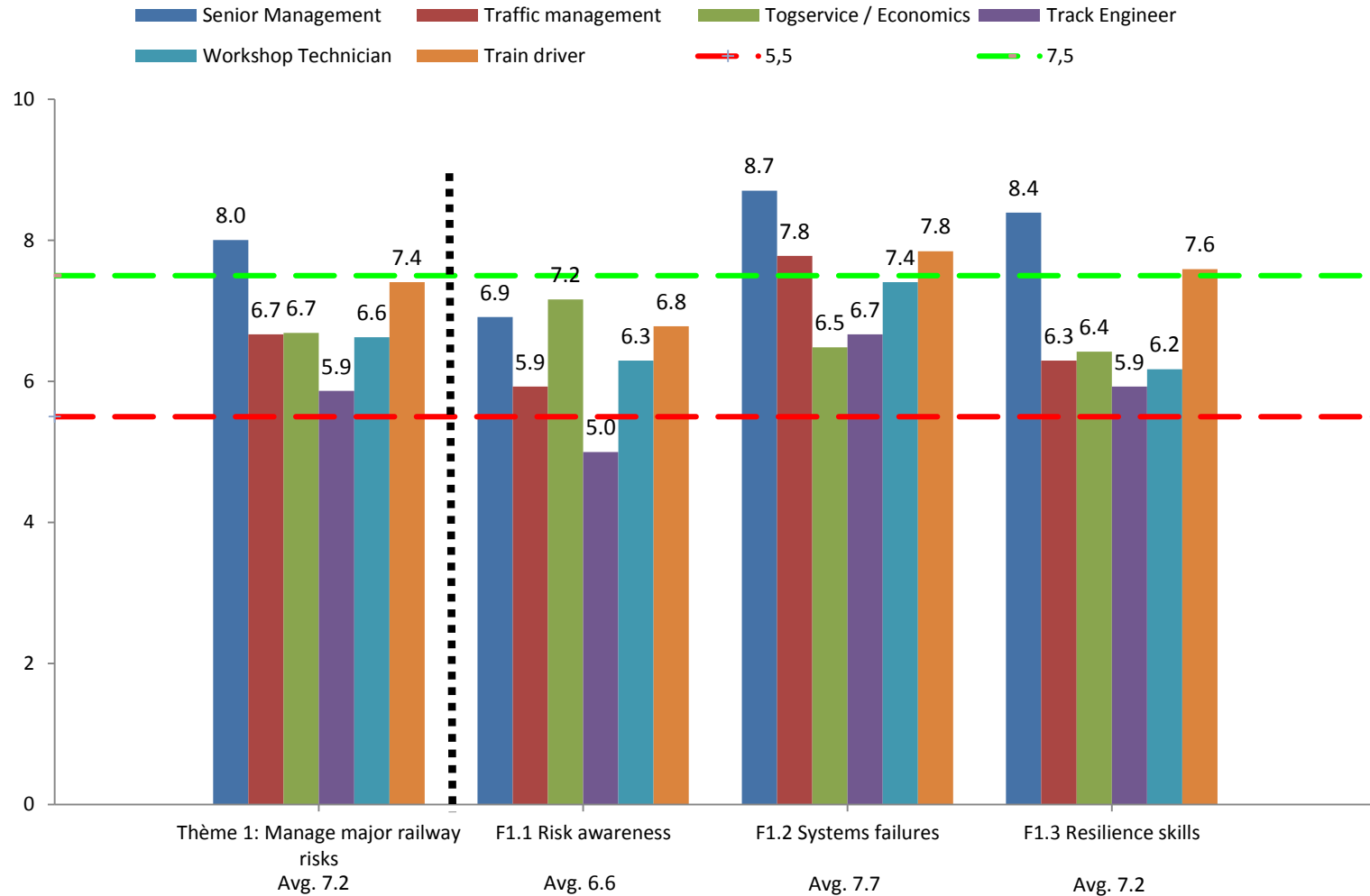
PERCEPTIONS: Global results per job position



Reading grid

Index > 7,5 → Strength
 6,5 < Index < 7,5 → Medium
 5,5 < Index < 6,5 → Drag
 Index < 5,5 → Weakness

Manage major railway risks



Analyse the questionnaire as preparation for: interviews, focus groups, observations

Titel	Question	Dansk translation	2.2	1.1	1.2	Spread	Comments and considerations for interviews and focusgroups	Track engineer	Traffic controller	Senior signaller	Senior signaller	Senior signaller	Senior signaller	Senior signaller	Senior signaller
F1.1	1. The safety approach in the organization makes it possible to control the risk as a risk.	Tilgangen til sikkerhed i den organisation gør det muligt at kontrollere risikoen som en risiko på et acceptabelt niveau.	2.2	1.1	1.2										
	2. Most accidents result from an individual's poor understanding of how to perform his/her tasks safely.	De fleste ulykker skyldes at man har en dårlig forståelse af, hvordan en opgave udføres sikkert og lovligt.	1.3	2.8	-0.5	Flip 10	High spread in senior mgn and traffic mgn	Very low score. Flip 2. Is the perception that there is a lack of training or is it a belief that people don't know how to do their tasks?	*	*	*	*	*	*	*
	3. In my job environment individuals lack understanding on how they contribute to safe railway.	I mit arbejdsområde mangler den enkelte medarbejder forståelse for, hvordan de bidrager til den samlede sikkerhed.	2.2	2.2	0.3			Track engineer score 5.6	*	*	*	*	*	*	*
	4. There shall have full authority to stop operations at any time if they observe a hazardous condition.	Medarbejdere har beslutningskompetence til at stoppe arbejdet hvis de observerer en situation hvor sikkerheden er i tvivl.	3.0	2.4	1.2	Top 10		Good result, avg. 6.4. Is the difference in perception due to function or perception training?	*	*	*	*	*	*	*
	5. Decision-making is sometimes insufficient.	Ved forandringer til sikkerhedsreglerne er den daglige sikkerhed i den organisation overbetænksom.	2.2	1.8	0.9			Question mark on the last translation.	*	*	*	*	*	*	*
F1.2	6. Safety is considered.	Sikkerhed er betragtet som en vigtig del af arbejdet.	2.2	1.7	0.8										
	7. Adequate training on how to deal with unexpected situations is provided when changes are introduced.	I forbindelse med forandringer bliver uddannelsesforløbet, så medarbejdere er forberede på at håndtere uventede situationer.	4.5	3.1	1.7	Very high gap	Agg. score 7.2 is good. But there is a very high gap, in particular between track engineers (4.4) and traffic mgn (5.8) to the others.	*	*	*	*	*	*	*	*
F1.3	8. Sometimes it is necessary to take risks to get the job done.	Der er nogle gange nødvendigt at tage en risiko for at få arbejdet udført.	2.7	3.2	1.1	High speed in 4 categories	Agg. score 7.4 is good. But there is a very high gap, in particular between track engineers (4.8) and Traffic mgn (5.8) to the others.	*	*	*	*	*	*	*	*
	9. Only the basic details of reported accidents are documented.	Kun de mest basale detaljer om indmeldte ulykker bliver dokumenteret.	1.5	2.0	0.5	High speed in 3 categories	Agg. score 7.3. Wide difference between traffic mgn and traffic mgn. Agg. score 6.6. Huge difference between track engineer (5.0), traffic mgn (5.8) and senior mgn (6.5) - in general almost high.	*	*	*	*	*	*	*	*
F2.1	10. The management of this company is positive towards ideas and suggestions of employees to improve safety.	Ledelsen er løbende overfor ideer fra medarbejdere i forhold til at forbedre sikkerheden.	2.4	1.7	1.0			Good avg. 7.5. Huge gap between track engineers (4.4) and an senior (5.8) and senior mgn (5.3).	*	*	*	*	*	*	*
	11. When questioning a rule or routine due to safety reasons, it is usually ignored by the superior.	Hvis der spørges om ændringer af sikkerhedsregler, bliver det normalt ignoreret af den daglige ledelse.	4.4	3.8	1.8	Very high gap	High speed	Agg. 6.5. Huge gap.	*	*	*	*	*	*	*
F2.2	12. In this organization it is easy to suggest solutions when it is difficult to apply procedures and rules.	I denne organisation er det let at foreslå nye løsninger, når det er svært at anvende procedurer og regler.	2.6	3.0	0.5	High gap		Agg. 6.5. Huge gap.	*	*	*	*	*	*	*
	13. Employees take joint responsibility that routine deviations are reported and analyzed.	Medarbejdere tager fælles ansvar for at rapportere gentagne afvigelser fra normen, selv om det ikke synes at være umiddelbart sikkerhedsrelevante forhold.	1.9	2.8	0.1	Flip 10		Low Avg. 6.2. Huge gap between track engineers and the rest.	*	*	*	*	*	*	*
F2.3	14. Sometimes incidents that could have had serious consequences for individuals of the organization.	Der sker at hændelser der kunne have medført alvorlige konsekvenser for personer.	3.2	1.7	2.8			avg. 6.7. Large gaps between the groups indicated and the rest.	*	*	*	*	*	*	*
	15. It is possible to raise safety concerns.	Det er muligt at rapportere sikkerhedsproblemer.	2.6	2.4	0.8	Top 10		High score 6.8 but huge gap between workshop technicians and the rest.	*	*	*	*	*	*	*
F2.4	16. Reporting certain safety incidents.	Rapportering af visse sikkerhedsrelaterede hændelser.	0.3	0.6	0.4	Very low gap		avg. score 7.3 but huge gap between train mgn (5.3) and the rest.	*	*	*	*	*	*	*
	17. If the department is improved by learning from past experiences in general or in specific safety incidents.	Hvis erfaringer fra tidligere sikkerhedsrelaterede hændelser bruges til at forbedre sikkerhedsregler og regler.	2.6	1.9	1.2			Everybody seems to like rules and procedures.	*	*	*	*	*	*	*
F3.1	18. Individuals in the organization take every opportunity to make suggestions to improve safety aspects of their work.	Medarbejdere har fuldt ud brug for muligheden for at foreslå forbedringer af sikkerheden i deres arbejde.	0.7	1.1	0.2	Flip 10	High gap	Low avg. 6.1. Little gap.	*	*	*	*	*	*	*
	19. When a risk is detected, management ignores it and does not take action.	Når en risiko bliver opdaget, bliver den ikke taget alvorligt og der tages ingen handling.	3.5	1.5	2.1			avg. 6.7. Large gaps between very positive senior mgn to less positive groups marked.	*	*	*	*	*	*	*
F3.2	20. Accident investigation is mainly used to identify who is to blame.	Undersøgelser af ulykker bruges primært til at bestemme hvem der er skyld i den.	3.1	2.8	1.8	Flip 10		avg. 6.3. Large gap between senior mgn and the groups marked.	*	*	*	*	*	*	*
	21. Employees are aware of actions taken by the organization to reduce the level of safety concerns.	Medarbejdere er opmærksomme på sikkerhedsforanstaltninger.	2.0	1.7	0.5										
F3.3	22. Staff have trust in each other's ability to ensure safety.	Medarbejdere har tillid til hinandens evner til at sikre et tryk.	0.3	1.4	0.4										
	23. When companies staff ignores safety rules and procedures, it is mostly organizational concerns.	Når sikkerhedsregler og procedurer bliver ignoreret, skyldes det primært organisatoriske problemer.	2.2	1.5	1.3	Top 10		avg. score 6.6, senior mgn high (6.7) the groups marked are pulling down.	*	*	*	*	*	*	*
F4.1	24. Team meetings organized in the organization allow employees to participate in solving safety issues.	IT møder er der mulighed for medarbejdere at deltage i løsnings af sikkerhedsproblemer.	3.1	2.8	1.5										
	25. Managers in the department ensure that frontline employees have the resources to do safety.	Den daglige ledelse sikrer at medarbejdere har alle nødvendige ressourcer til at udføre arbejdet sikkert og lovligt.	3.3	1.3	1.5			good avg. 7.4 senior mgn very high (6.5), track engineer (5.6) and signaller (5.7).	*	*	*	*	*	*	*
F4.2	26. If you get more people allocated to do a job, it is more time for safety issues.	Hvis man får flere ressourcer, når det er nødvendigt på grund af sikkerhedsrelaterede forhold.	2.2	1.1	1.2	Very gap									
	27. The allocation of material and equipment show that safety is a priority.	Tilføjelse af materiale og udstyr viser at sikkerheden bliver prioriteret.	2.4	2.0	0.5			avg. 6.3. Track engineer (5.3) and traffic mgn (5.7) pulling down.	*	*	*	*	*	*	*

Doing the focus groups, observations and interviews



- Questionnaire + analysis
- Interviews
- Observations
- Focus groups
- Feedback to exec committee (snapshot)
- Not a “numbers game”

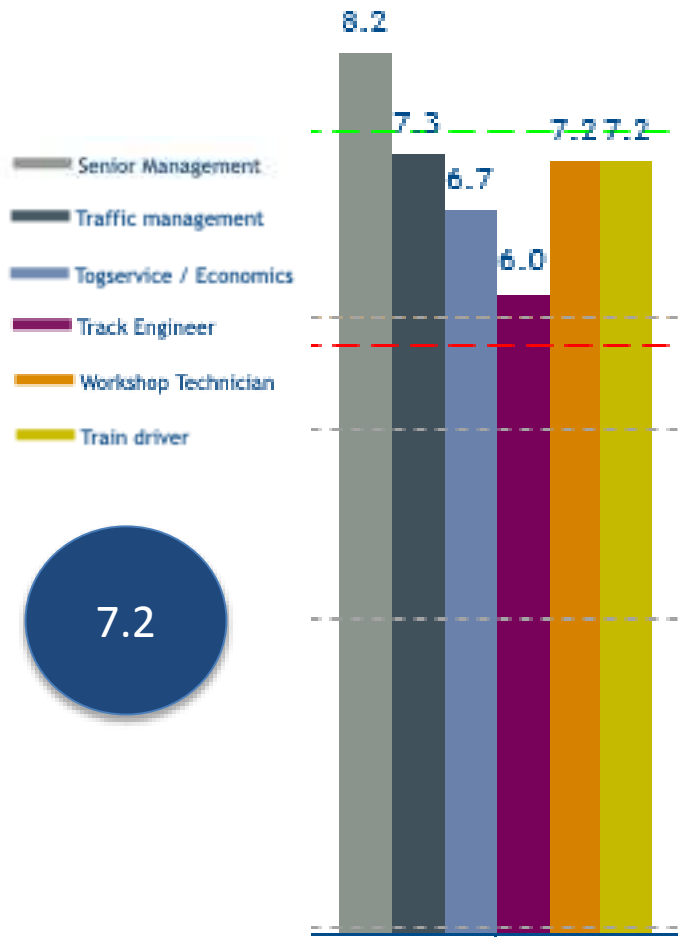
Everything is done in confidentiality

- F2.1
 - + “These new rules will be more user friendly”
 - - “It is too difficult to find something inside the tablet”
 - - “Our views should be more integrated in the planning and in the decision making at high level”
 - - “In ETCS some failures are so rare that we forget how to do things correct”
 - - How was the change of train service intervals risk assessed – ending up wearing down brake pads? “We discussed amongst us weather it would be possible to change the interval, but we were never asked about our opininon”
- F2.2
 - + “if people see something it is often corrected right away, and reported if it’s bigger things”
- F2.3
 - + “Overall it is a good workplace. The door is always open to the CEO.”

- E1.1
 - + “Good interactions with the train drivers, the staff. Good atmosphere for work.”
 - - “Communication between BDK and NJ is not good. When something happens they are not very good at telling us.”
- E1.2
 - + “Within the organisation, we can always discuss.”
 - + “I always get the help I need for a question.”
 - + “Today, there were a little accident. A driver cut the shift. The driver came to safety ‘I have done something wrong’. He didn’t hide. Because he likes to do the things right.”
- E1.3
 - + “We are open and transparent [with the NSA]. Because, I want to understand my problems. This is the good way to improve”.
 - +” NSA audits are good in the sense that somebody from outside comes to check”.

Strength: F2.3 Measures to identify and mitigate organisational silence are implemented

Area for improvement: F2.1 Human and organisational factors, including frontline experience, are systematically considered following safety events, deviations, and during design and change



“People are feeling comfortable speaking up here. Most of them will tell”

“The door is always open to the CEO”

“Today, there were a little accident. A driver cut the shift. The driver came to safety ‘I have done something wrong’.

“The leaders do not know what is going on in the trackside.”

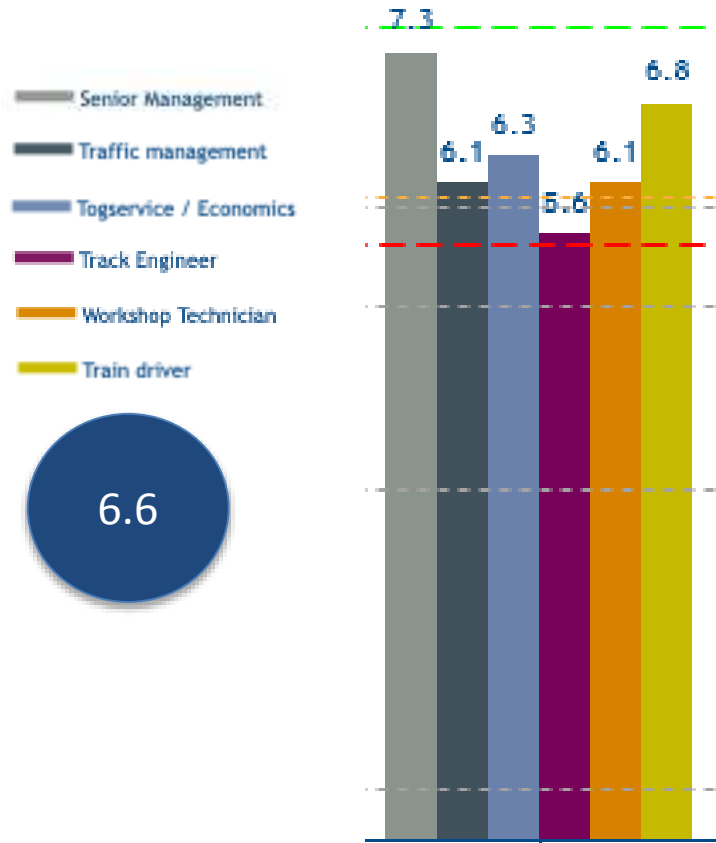
“Our views should be more integrated in the planning and in the decision making at high level”

“It is too difficult to find something inside the tablet”

“How was the change of train service intervals risk assessed – ending up wearing down brake pads? We were never asked about our opinion”

Area for improvement: E3.1 Safety information is openly shared, up, down and across the organisation and with audit and regulatory organisations.

Area for improvement: E3.3 Safety leadership skills are systematically developed.



Mentoring practice in the workshop
"The rules are the easiest part of teaching.
Trainings here address values and behaviours."

"Safety is not addressed during the morning brief"
"I would like to have more sharing. The newsletter is just the headlines. Not the details. There is more to learn"
Emergency/Evacuation: "We have procedure. A training would be necessary."
"I haven't had a safety introduction since I came."



A Method for Leading Safety Culture Change (ICSI)



There is no magical recipe model for action, only a model adapted to your own context

Workshop 2: Assessment and vision exercise

IPA safety summit, Belgrade November 2019
Kim Drews

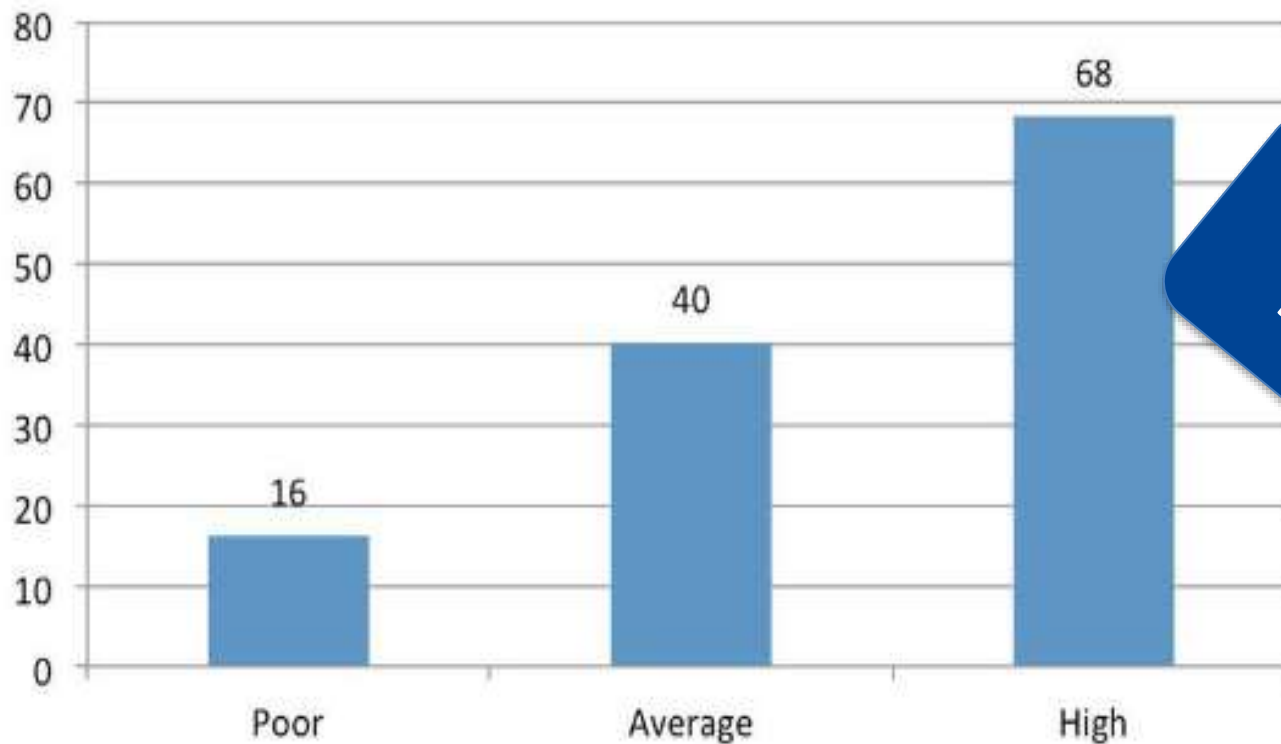


01
CREATE THE SAFETY VISION



Engagement (percentile)

(Folkman 2014)



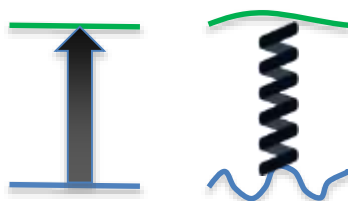
ASPIRATIONAL & INSPIRATIONAL

Meaningful vision (staff perception)



Four overarching principles that shall be fulfilled to maintain safety and sustainable performance.

01
CREATE THE SAFETY VISION

TASK VS ACTIVITY



CONTROL MAJOR RISKS

UNDERSTAND WORKPLACE REALITY

LEARN FROM EXPERIENCE

INTEGRATE SAFETY CONSISTENTLY

F1

F2

F3

F4

FUNDAMENTALS

➤ 1. Pick the most relevant issues/problems in your organisation from the questions

Fundamentals	Key words	Attributes		Statements	strongly disagree					
F1 Control Major Risks	Risk Awareness	F1.1	Individuals at all levels are aware of major risks and understand their personal contribution to safety.	F1.1.1	The safety approach in my organisation makes it possible to control major risks					
				F1.1.2	In my work environment, there is no individuals with lack understanding on how their role contributes to railway safety					
				F1.1.3	At all levels there is a common understanding of the major risks					
	Resilience	F1.2	The capability to operate safely under unexpected situations is developed	F1.2.1	My organisation adapts adequately to changing conditions when safety is concerned					
				F1.2.2	Individuals know how to behave and act in unexpected situations					
	Questioning attitude	F1.3	Individuals at all levels avoid complacency, challenge assumptions, encourage and consider opposing views.	F1.3.1	Talking about safety is not important because we are already safe					
				F1.3.2	Staff is encouraged to question decisions and assumptions					
				F1.3.3	In my organisation, it is pointless to raise safety concerns					
	F2	Working conditions	F2.1	The organisation recognises that working conditions, such as time pressure, workload and fatigue influence safe behaviours.	F2.1.1	The management provides sufficient means to ensure good conditions for safe operations				
F2.1.2					Some jobs here are difficult to do safely					
F2.1.3					Working here is not stressful					



- 2. For a few questions formulate “what good looks like” – where would you like your organisation to be on this topic?
- 3. Formulate how you would know that you achieved “what good looks like” – how could it be measured?

Weak spots	Discribe optimal solution	Safety Vison Statements	How to achieve it? Chose enablers/activities	Goals/KPI

- Feedback from the exercise
 - How did it go?
 - Is the exercise useful?
 - Why/why not?
 - What did you take away from these work shops?



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