

# CAUTION

**SAFETY CULTURE  
IN  
ACTION**



Inspectie SZW  
*Ministerie van Sociale Zaken en  
Werkgelegenheid*

Everything you  
always wanted to  
know about...

## Safety Culture

Menno Meems



22-9-2015



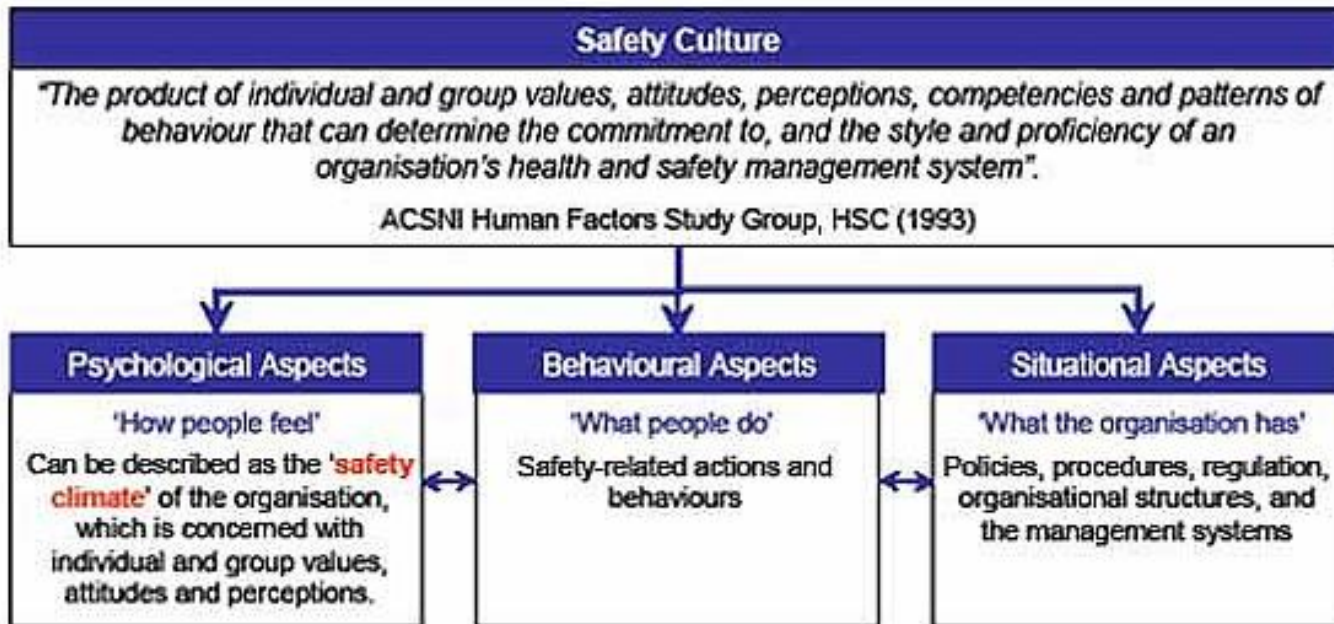
# Trevor Kletz



Remembering\_Trevor\_Kletz.mp4

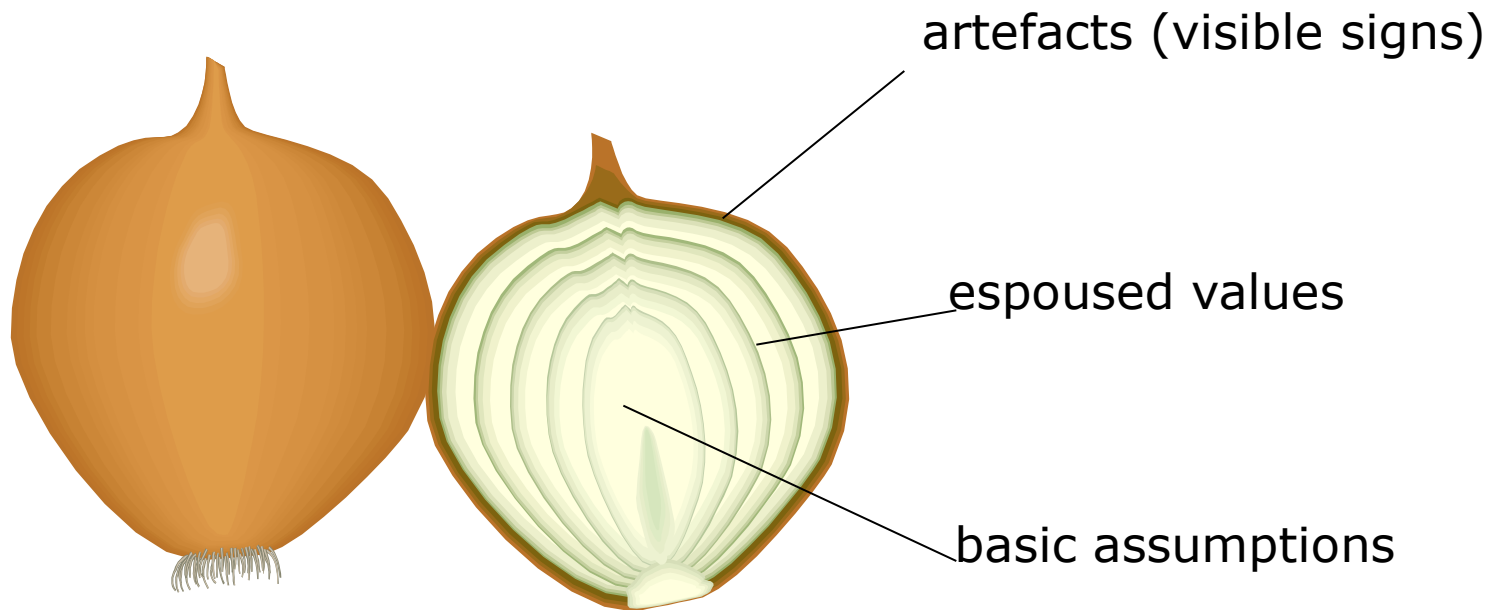


# ACSNI model safety culture





# Edgar Schein's culture model



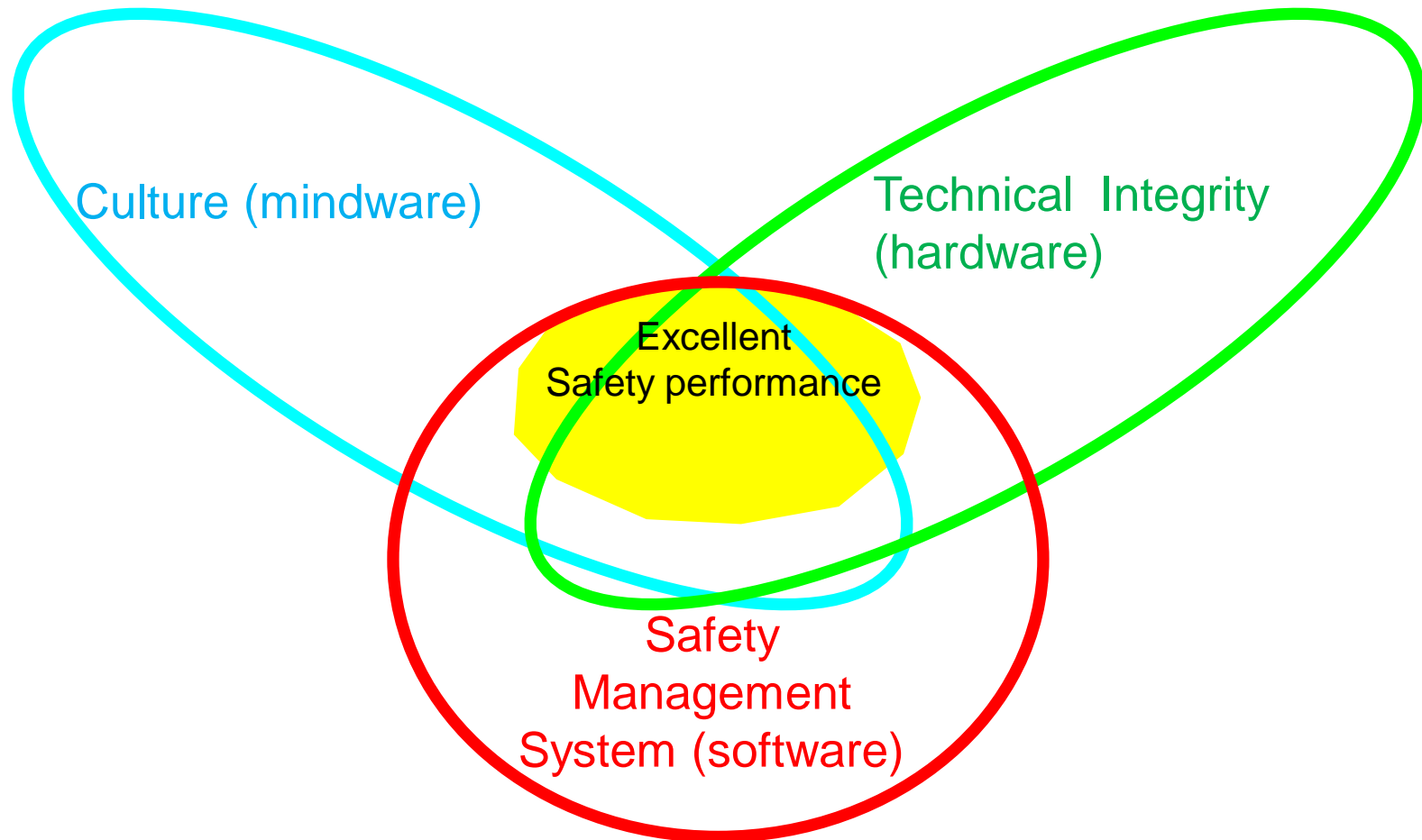


Basic assumptions: the explanation of why we do things in a certain way.

- Time is money
- We must achieve our targets

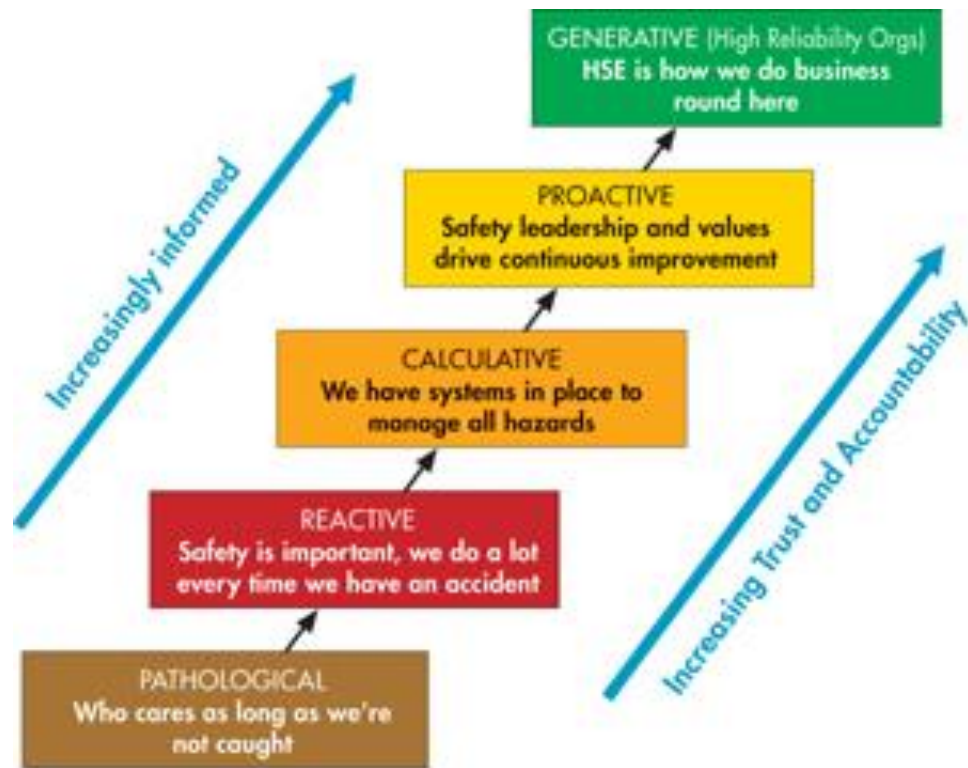


# Safety performance model



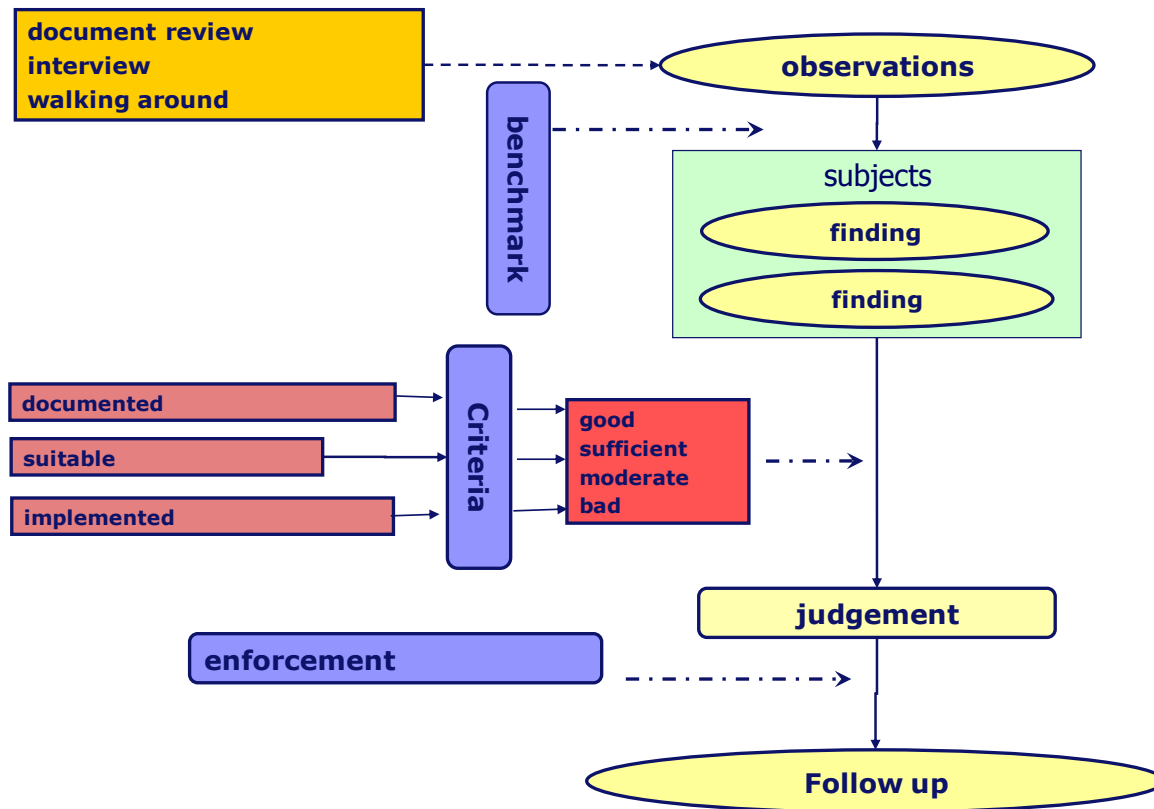


# Hearts and Minds - understanding your culture

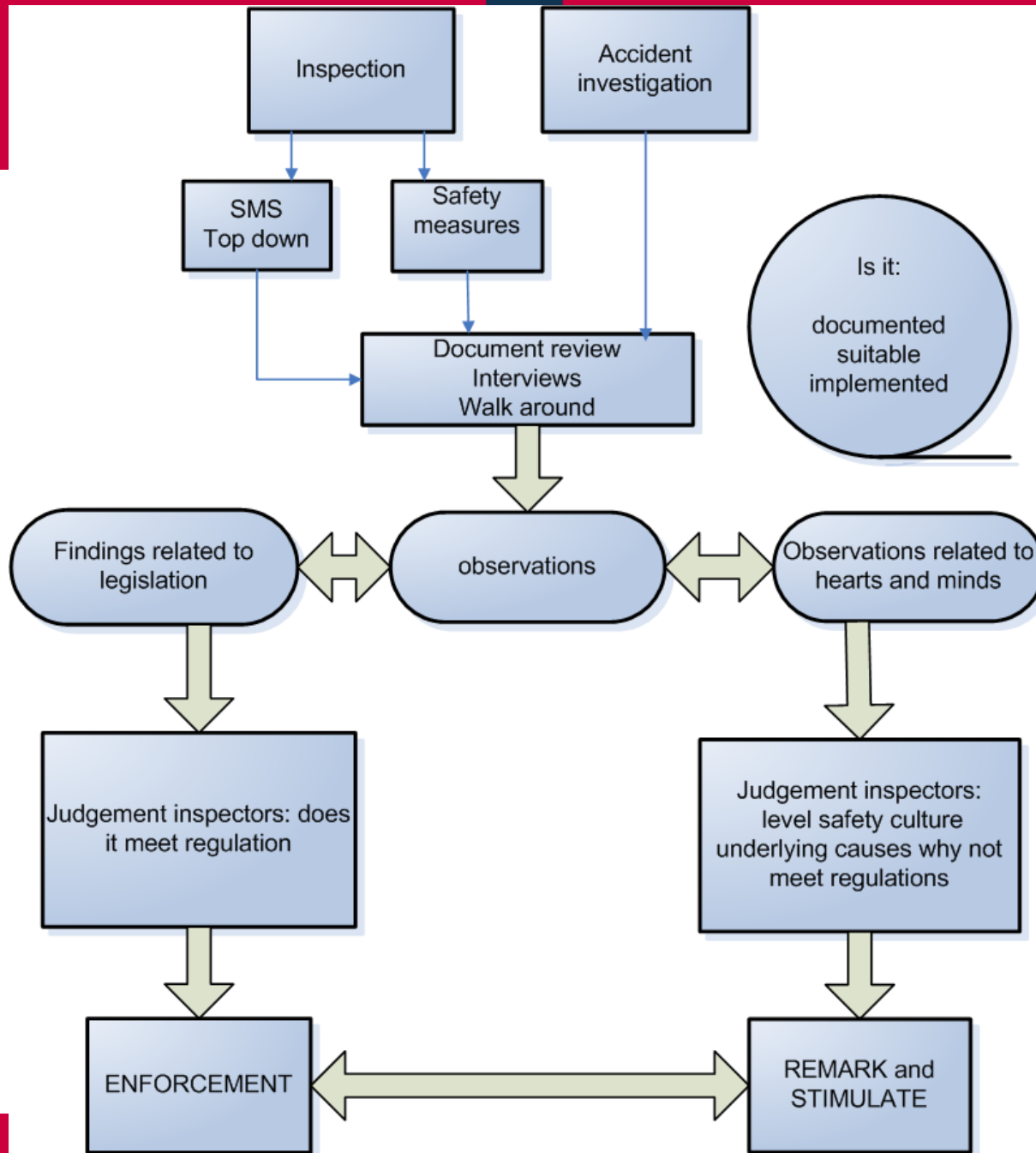




# Dutch inspection model

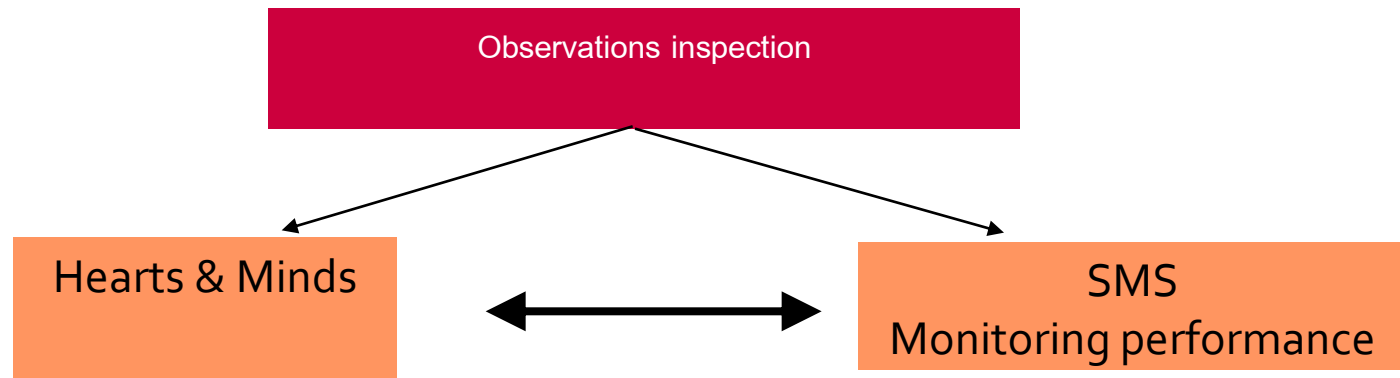








## example



**Who causes accidents in the eyes of management?**

**Incident/accident reporting investigation and analysis**

**What happens after an accident? Is the feedback loop closed?**

**Is a system implemented for reporting major accidents or 'near misses', and their investigation and follow-up on the basis of lessons**



## Culture levels monitoring performance (accidents)

### ***Pathological (denying)***

Many incidents are not reported. Only serious accidents.  
After incident focus on involved employees.  
Priority get back to production

### ***Reactive***

There is a reporting system and investigations of incidents is aimed only at immediate causes. Who can be blamed.  
Management annoyed by 'stupid' accidents. Warning letters.  
Investigation reports not lined up.

### ***Calculative (bureaucratic)***

System for reporting and investigation in place but investigation not all times thoroughly to underlying causes.  
Top management worries about incident rating statistics



## Culture levels monitoring performance (accidents)

### ***Pro-active***

System for reporting and investigating accidents and near misses is implemented well. Investigation focuses on underlying causes.

Learning loop is closed.

The accident is well communicated.

### ***Generative***

Just like pro-active.

Also learning from accidents in other companies.



## Can we inspect on safety culture

- Yes we can
- watch points
  - Train inspectors, it is not as easy as it looks
  - Safety culture is a tool/instrument and should not be the end
  - Risk of getting “close” to the inspected persons (threatening)



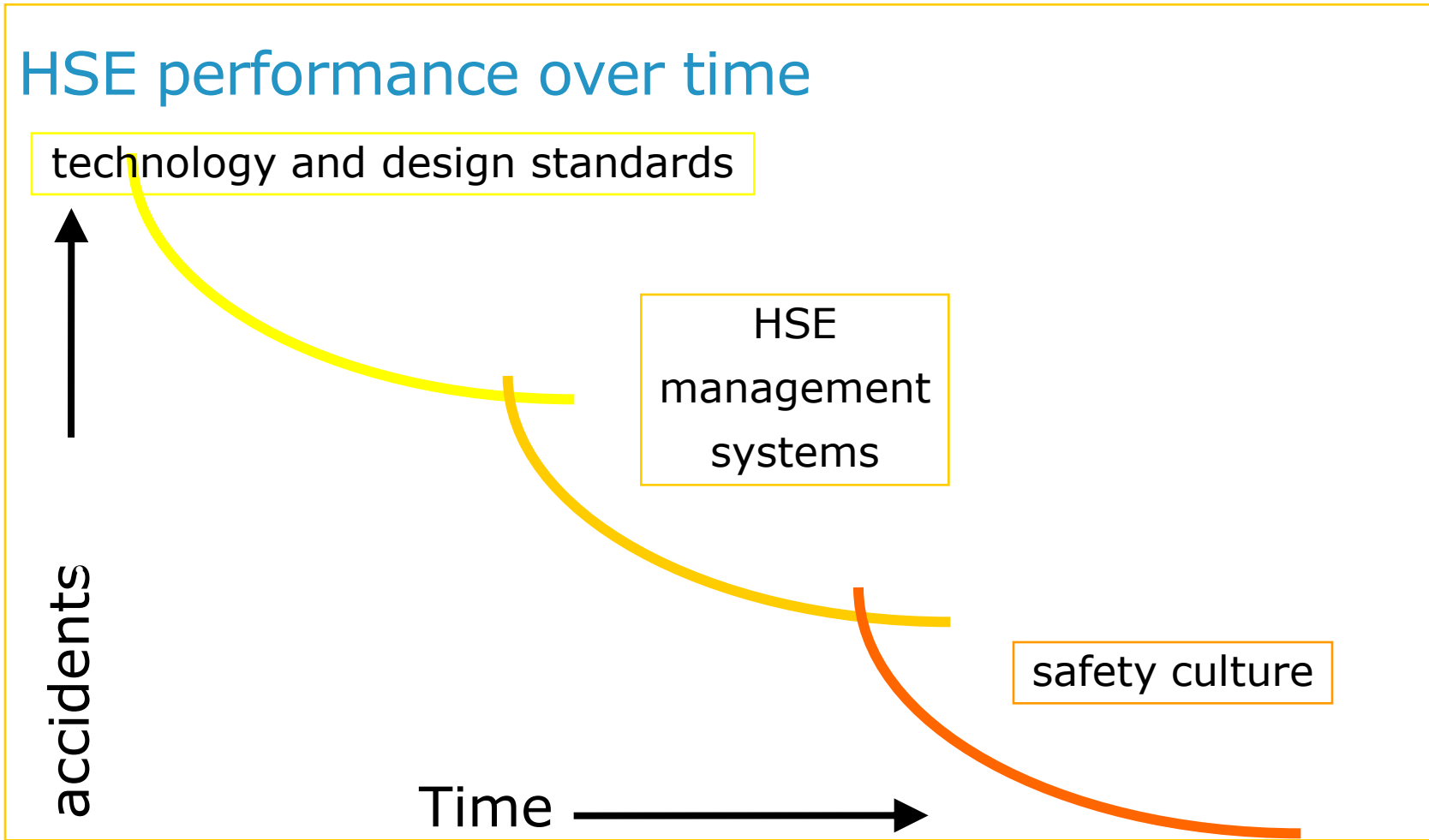
# Developments

## Instrument for estimating the safety culture level

- based on hearts and minds
- short questionnaire for inspectors (15 min)
- used for the relative ranking of companies



# HSE performance over time





## Accidents

<http://www.csb.gov/>

Major accident reporting system (MARS):

<https://emars.jrc.ec.europa.eu/?id=4>

### **Industrial accidents worldwide**

270 million, 1 million fatal

12.000 children involved





## Why accidents happen again and again

We forget about the lessons from accidents, and do not learn

We often think: "it never went wrong, it will not happen to us"

Ignore (weak) signals (not my problem)

Complacency and lack of self criticism

Production versus Safety

**Poor safety culture awareness?**

**Poor safety culture?**



## How to establish organisational learning

- SMS ->create structure in learning processes
- create a strong safety culture

### Learning processes:

- Safety performance indicators
- Audits
- Investigation of incidents/accidents, near misses and dangerous situations.
- Taking appropriate action!! and evaluate them



## Heart of safety culture and sustainable safety: LOC

LEADERSHIP – Management Commitment

OWNERSHIP – Empowerment

COMMUNICATION

Key conditions for organisational learning and improve safety culture:

Trust and equivalence

Openness

Valid information (well informed)

Common responsibility

Be concrete, honesty

Be positive critical



## Baker Report (BP Texas)

“We are under no illusion that deficiencies in process safety culture, management and corporate oversight are limited to BP”

1. BP does not have a designated , high ranking leader for process safety

Consequence: Process safety is not a core value

2. BP has not established a positive, trusting and open environment with effective lines of communication between management and the workforce.



## Chemie-Pack Moerdijk (Dutch Safety Board)

The Board has also determined that the Netherlands is mostly unaware of the important lessons learned in the United Kingdom regarding the vulnerability of IBC's in the event of a fire



# Questions?

