

Working on safety, Scotland  
01.10.2014

# Regulating the intangible

Searching for safety culture in the Norwegian petroleum industry

Stian Antonsen , Dept. of Safety research, SINTEF

Marie Nilsen, NTNU

Petter Almklov, NTNU Social research Ltd.

# Starting point

- Problem to be addressed: Is it meaningful to include requirements to safety culture in regulation?
- Sector: Norwegian petroleum industry
- Methods: 21 interviews with key personnel in the industry
  - The Petroleum Safety Authority (the regulator)
  - Two oil & gas companies (the regulated)
- Theoretical relevance:
  - From an intra-organizational to inter-organizational view on safety culture
  - How can external/institutional factors influence on companies' inner workings

# Can safety culture be regulated?

## Section 15

### Sound health, safety and environment culture

*A sound health, safety and environment culture that includes all phases and activity areas shall be encouraged through continuous work to reduce risk and improve health, safety and the environment.*

- How can you specify requirements to safety culture
  - ... without an agreed-upon definition of culture?
  - ... when it is hard to distinguish between "good" and "bad" culture?
  - ... when it is hard to determine compliance or non-compliance?

# Previous research

- KARLSEN, J. E. & VALEN, H. 2011. The social construction of HSE culture - The Case of Norwegian Petroleum. *Safety Science Monitor*, 15.
- KRINGEN, J. 2008. *Culture and control. Regulation of risk in the Norwegian petroleum industry*, Oslo, University of Oslo.
- KRINGEN, J. 2013. Proceruralization and regulation of culture: Experiments on the frontiers of risk regulation. In: BIEDER, C. & BOURRIER, M. (eds.) *Trapping safety into rules. How desirable or avoidable is proceduralization?* Farnham: Ashgate.
- LE COZE, J.-C. & WIIG, S. 2013. Beyond procedures: Can 'Safety Culture' Be regulated? Trapping safety into rules. how desirable or avoidable is proceduralization



# What are the consequences of the requirement for a "sound HSE culture"



# The regulatoru

- Cultural changes within the regulator's organization?
  - HSE culture challenging the assumptions of a "technical culture"
  - Sensitizing the regulator to include new perspectives into regulatory practice
- New thinking with the regulator a prerequisite for fostering new thinking in the industry

*We were in a meeting yesterday which was interesting, because there were people there that I wouldn't expect to get anywhere near [the concept of] culture. They had just got back from an investigation of a very serious incident. They actually considered issuing an order based in the culture paragraph. They were told not to do it, but I liked the way they were thinking. It was quite revolutionizing, a positive development.*

# The regulatoru

- A new legal basis
- Asking new questions related to organizational properties
- Increased emphasis on the role of top management
- From safety management to corporate governance

*We've been asking simple questions. "What kind of information do you have on your desk that tells you how things are actually going" [regarding safety]. And they can't answer that, they revert to the accident statistics that they are presented with once a month. They need to have information to be able to manage the company and develop the company.*

# The regulateded

- Confusion...
  - But is ambiguity necessarily negative?
- Efforts to make sense of the concept of HSE culture
- Searching for ways to respond to the regulations
- A productive search for ways to address the informal aspects of safety?

*They [the PSA] received so much criticism: "What on earth do they want with that paragraph?" That was the main feedback. It was not concrete enough (...) I think that the PSA was very brave in introducing that paragraph. It resulted in many discussions (...) I think it was a very good process.*

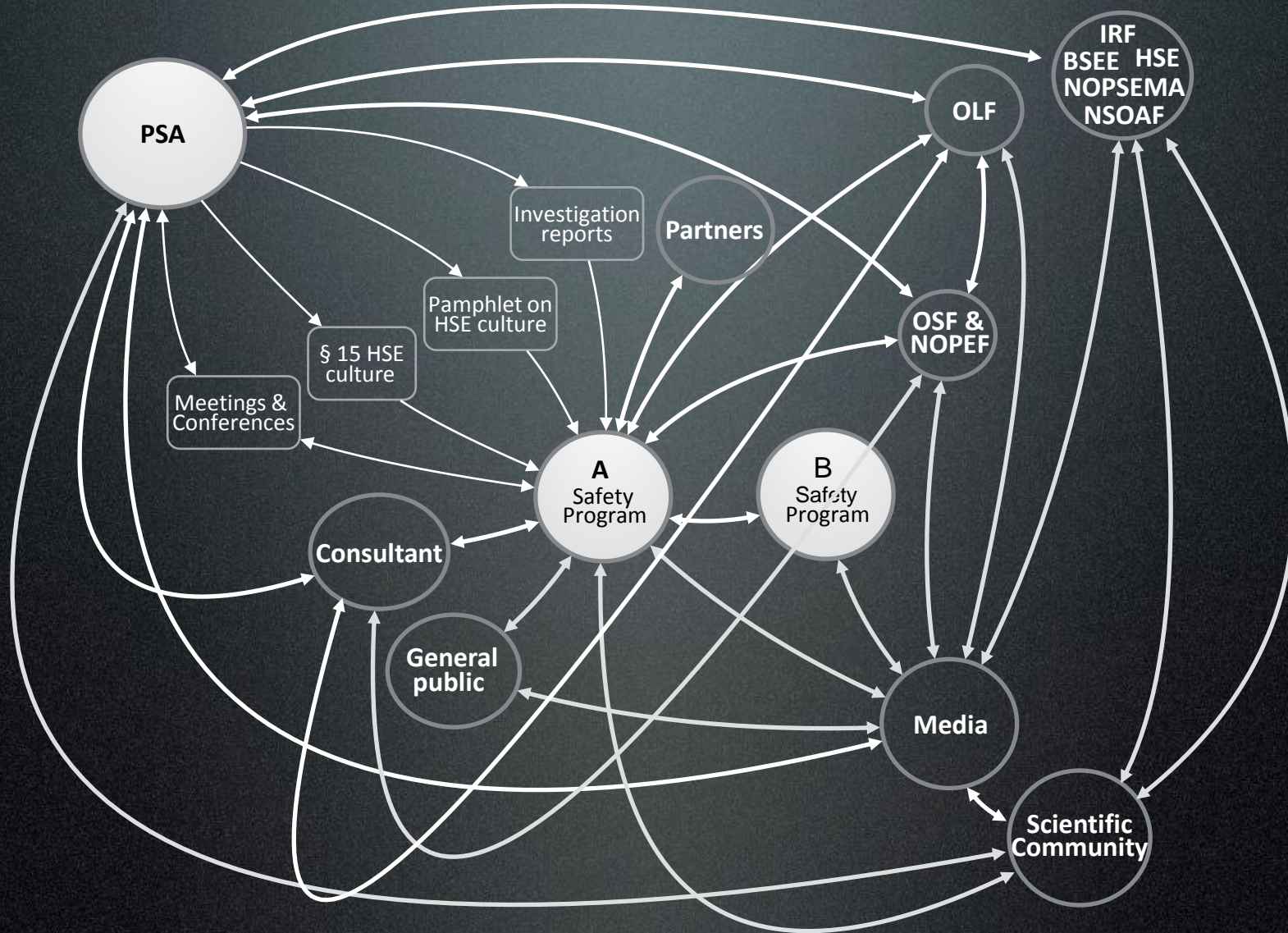


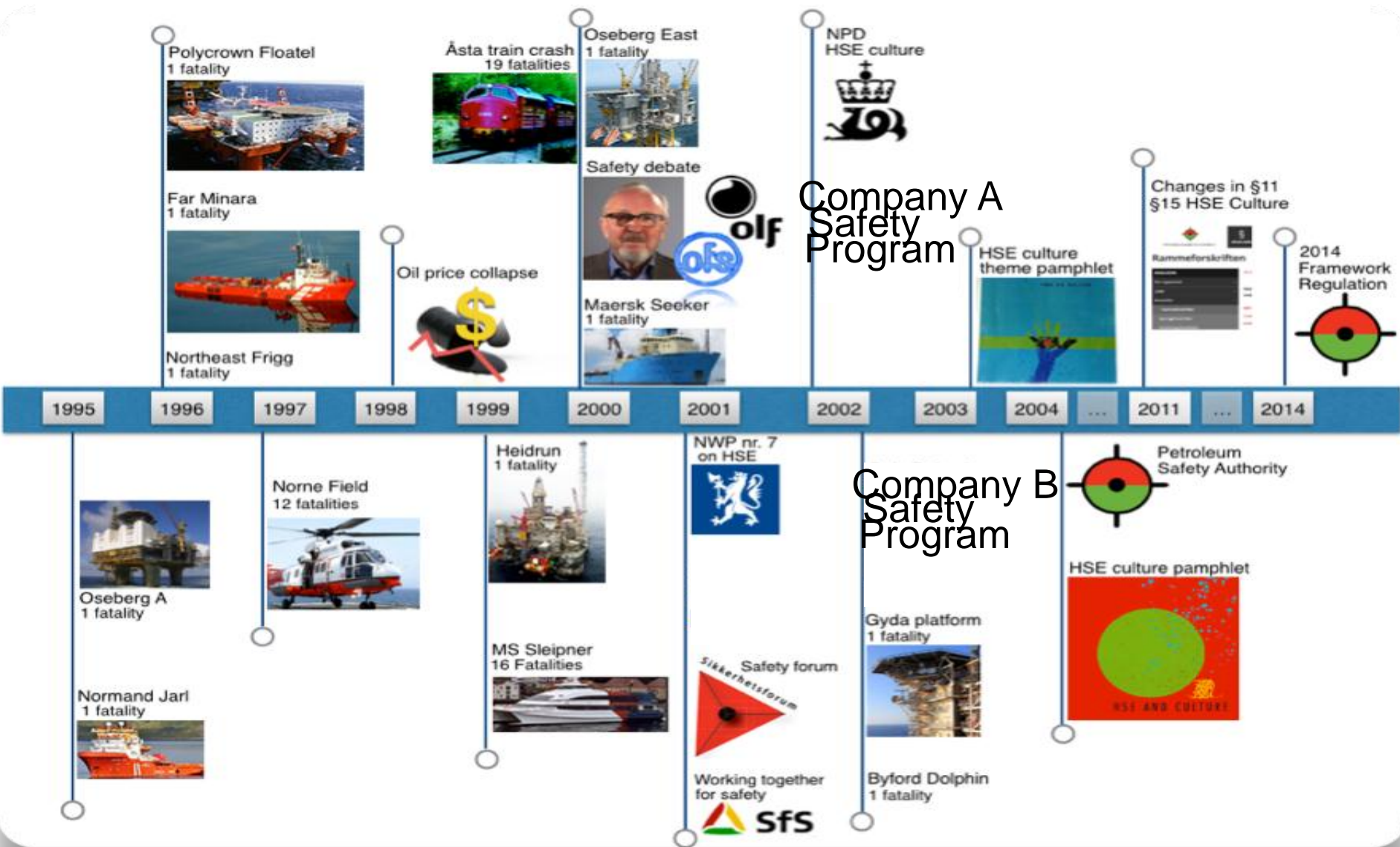
# Communication between the regulator and the regulated

- The command and control perspective on regulation

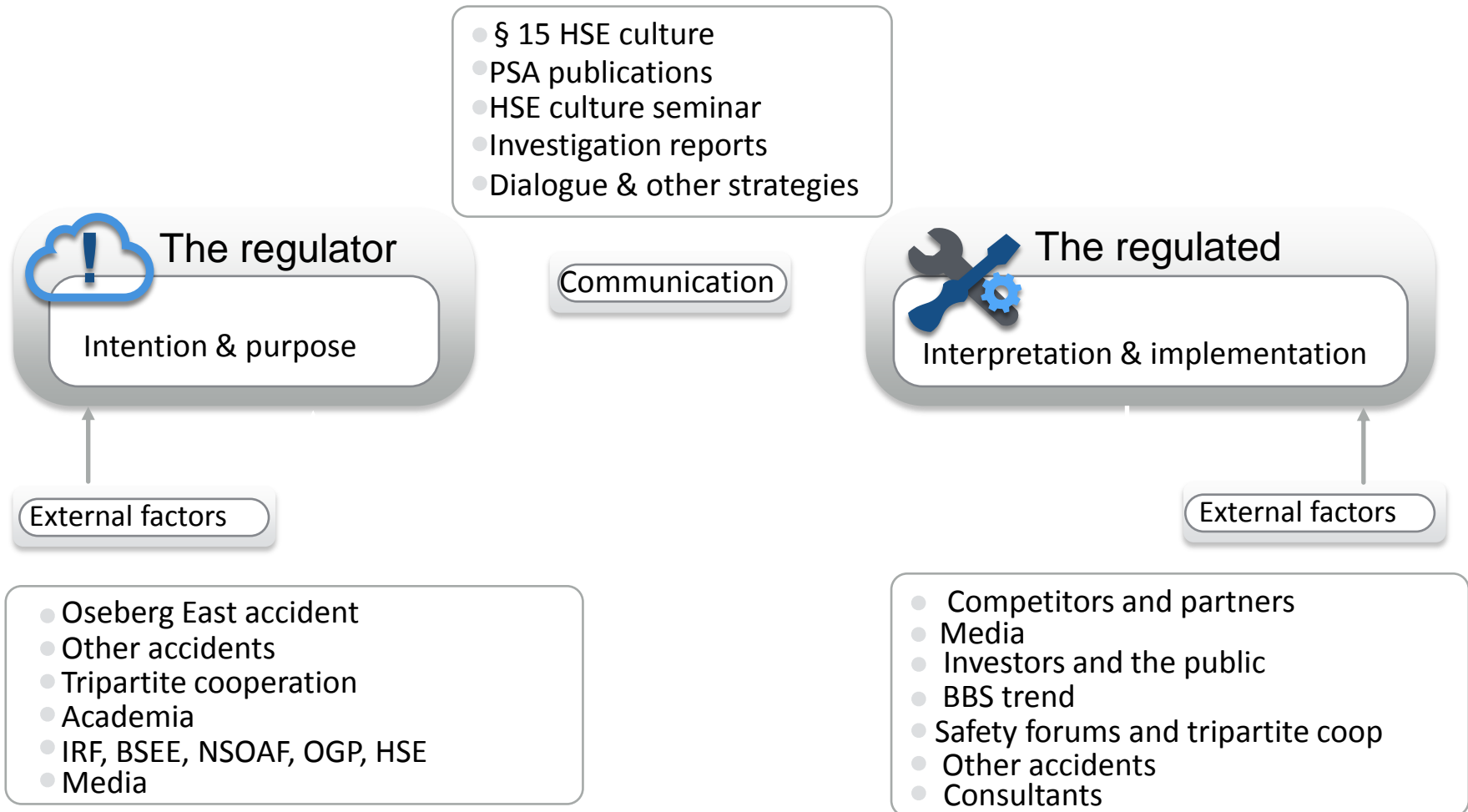


- How does this look from a more institutional perspective?





# External/institutional factors



# Conclusions

- Can regulators influence companies' safety cultures?
- No:
  - Cultures cannot be engineered – people (fortunately) tend to have opinions of their own
  - Regulators compete with other voices in the field
- Yes:
  - Regulation produces framework conditions. These may, in turn, influence culture
  - Regulation is more than command and control. Arenas for cooperation and dialogue can foster new thinking
  - Regulators can set the agenda for the institutional field