

# Safety og Security: Er det egentlig så store forskjeller mellom safety og security?

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ESRA 22. juli



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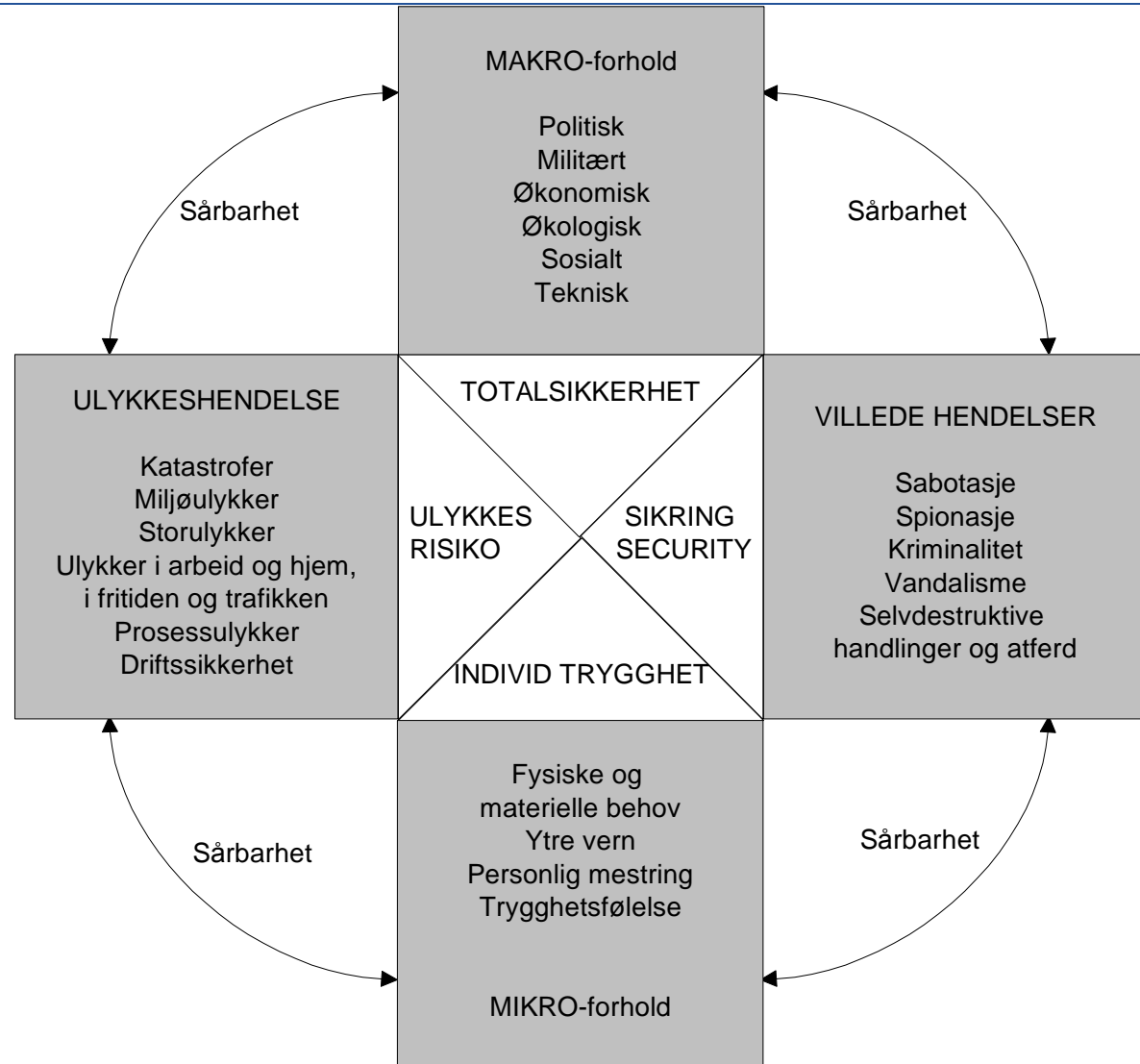
Universitetet  
i Stavanger

# Samfunnssikkerhet handler om....

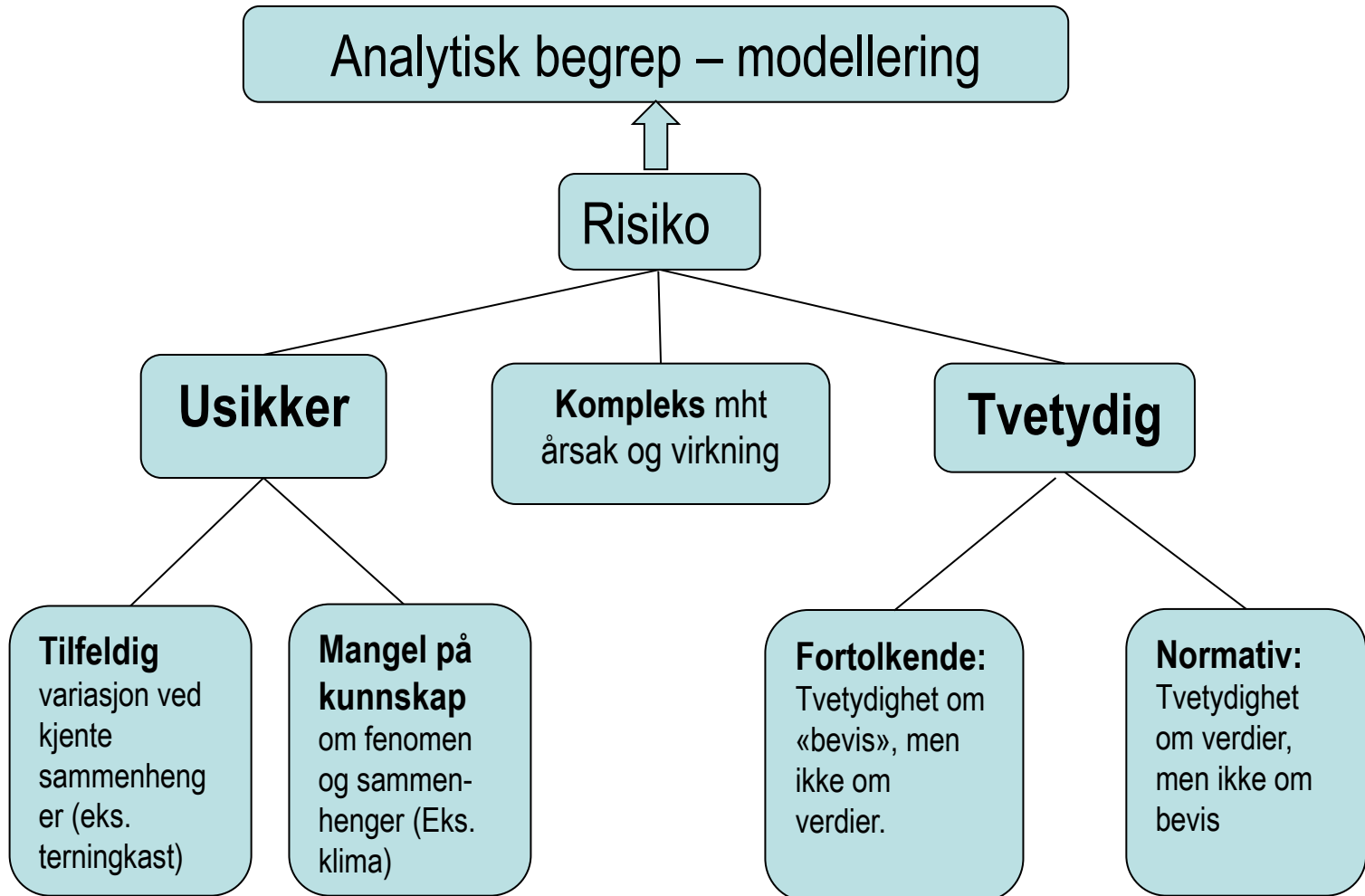
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- *Ekstraordinære påkjenninger og tap*: Hendelser som samfunnet ikke kan håndtere ved hjelp av ordinære rutiner
- *Kompleksitet og gjensidig avhengighet*: Hendelser eller forebygging av hendelser i teknologiske og sosiale systemer med sterk gjensidig avhengighet
- *Tillit til vitale samfunnsfunksjoner*: Hendelser eller forebygging av hendelser som undergraver tilliten til at samfunnets institusjoner ivaretar de individuelle og kollektive rettighetene

# Hovdens "tankekors"



# Kjennetegn ved risikobegrepet

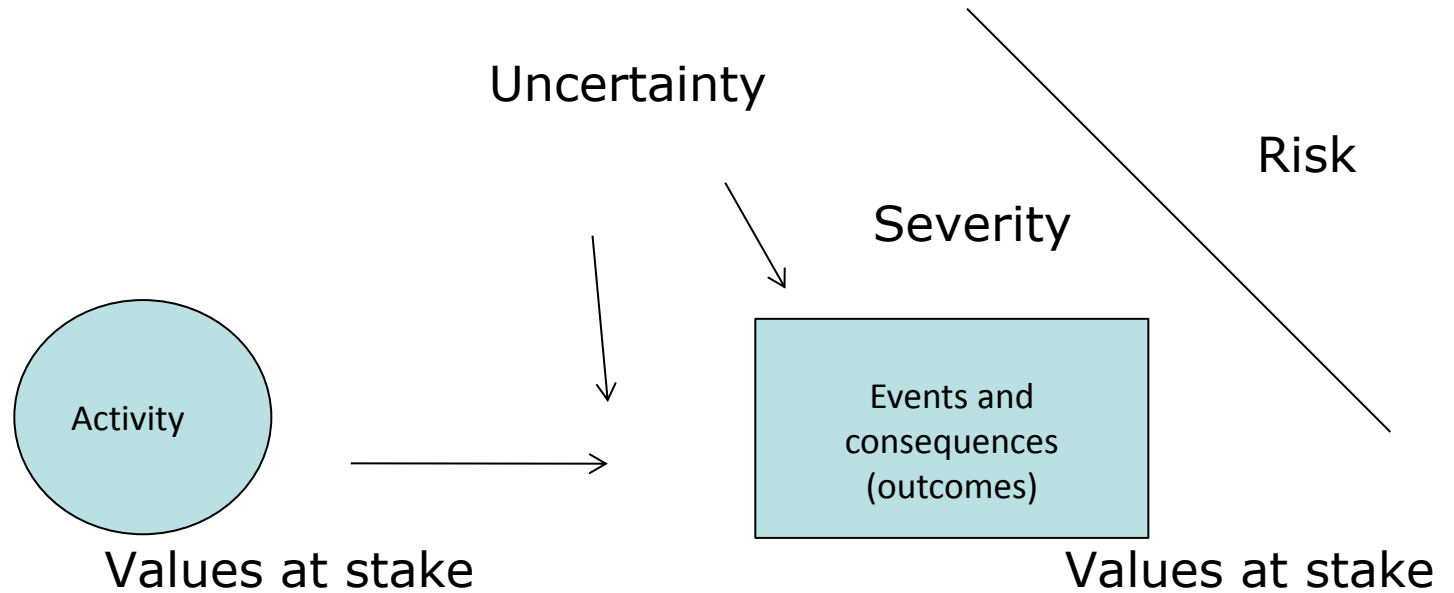


# Hva er risiko?

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- *Risiko refererer til usikkerhet om og alvorligheten av hendelser og konsekvenser (eller resultater) av en aktivitet med hensyn til noe mennesker verdsetter*

# Hva er risiko?



# Risiko og samfunnssikkerhet ulike fenomener og ulike nivåer

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Terror og sabotasje, Klimaendringer, dårlig vær, naturkatastrofer, Sikkerhet i teknologiske systemer, Radioaktivitet, Transportsikkerhet, IKT sikkerhet, Genteknologi og sikkerhet, Forsyningsberedskap, Mat og vann sikkerhet, Pandemier og smittevern, Informasjonsberedskap før og under en krise, Store kjemiske forurensinger, Betalingssystemer og finans

## **Stor usikkerhet!!!!**

- Organisering
- Institusjoner
- Politikk



# Organisasjon

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- **Organisasjon:** «organisational safety and security implies rules, principles, procedures and practises in which risk management is based on»
- **Security vs safety** i ulike sammenhenger, Luftfart og petroleum
- Likheter, forskjeller og interessemotsetninger i hvordan de to konseptene får organisatoriske uttrykk



## Bakgrunn og motivasjon for denne innfalsvinkelen

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- Luftfart og petroleum er avanserte teknologiske systemer
- Det tradisjonelle «safety regimene» er basert på tradisjoner fra den sosio-tekniske tenkningen og hvor også HRO prinsippene er utledet fra
- Safety regimene er funksjonsbaserte, mens security regimene preskriptive mht. lovgivning, fortolkning og praksis



### **System vs. Environment (S-E) distinction**

- Security is concerned with the risks originating from the environment and potentially impacting the system, whereas safety deals with risks arising from the system and potentially impacting the environment

### **Malicious vs Accidental (M-A) distinction**

- Security typically addresses malicious risks while safety addresses purely accidental risks

# Risk Management & Risk Governance of Safety & Security

## The SEMA referential framework (Cambacedes & Chaudet 2010)

	Environment to system	System to environment	System to system
Malicious	Defense	Safeguard	Self-protection
Accidental	Robustness	Containment ability	Reliability

# Safety/security in the Petroleum Sectors

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- The Working environment act in the Nordic Countries: Specified regulations of active participation through formal bodies (decision making authorities, safety deputies)
- The Working environment act based "a socio-technical model of organisations»
- Trinity of collaboration and the Nordic OHS regime
- *Safety committes*
- *Autonomous institutions of safety representatives*
- *The Norwegian Petroleum agency*

# Security/safety in the aviation sector

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- Security regime post 9/11 characterised through concepts such as secrecy, rapidity and reactivity
- The Regulatory system has been moved from a national level to a supra national level
- Pre 9/11 ICAO recommendations used a guidelines and normally the recommendations went through hearings which normally was set to three months. This was to assure a minimum standard of openness and transparency.
- Today, the regulatives are developed by a small in group in Brussels, the translated and distributed to the airports with an expiry date for implementation. Some information so secret that only a handful of people have the clearance to see it
- The basic governance and management principles is top-down, prescriptive and elitistic (due to low involvement of people, organisations and institutions)



# Safety/security in the Petroleum/Aviation

<b>Safety, Petroleum sector, the "nordic model"</b>	<b>Security, Aviation, EU</b>
Goal based Participatory Bottom up	Prescriptive Elitist Top Down

# Security/Safety – organisational and regulatory consequences

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- Are security regulations compatible with principles of collective agreements constituting the foundation of the Nordic model?
- Are security regulations compatible with the socio-technical premises embedded in risk regulating models (e.g Risk governance model, deliberative principles etc.)

# Security/Safety – organisational and regulatory consequences

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The answer is NO at least according to Stornes (2011)  
*Security in Statoil*

- Risk governance and risk management in the petroleum sector and in Statoil has been almost unambiguously beren organised around the safety regime.
- The security regime within Statoil is prematured developed and lacks sufficient competence and resources
- A need to strenghtening the risk analysis procedures of the security regime
- Advocates of the security regime wants to free themselves from the safety regime
- They argue in favour of a detailed, prescriptive regulatory framework and with more internal control.
- Adaption of internal security regimes similar to internal procedures in the airports.

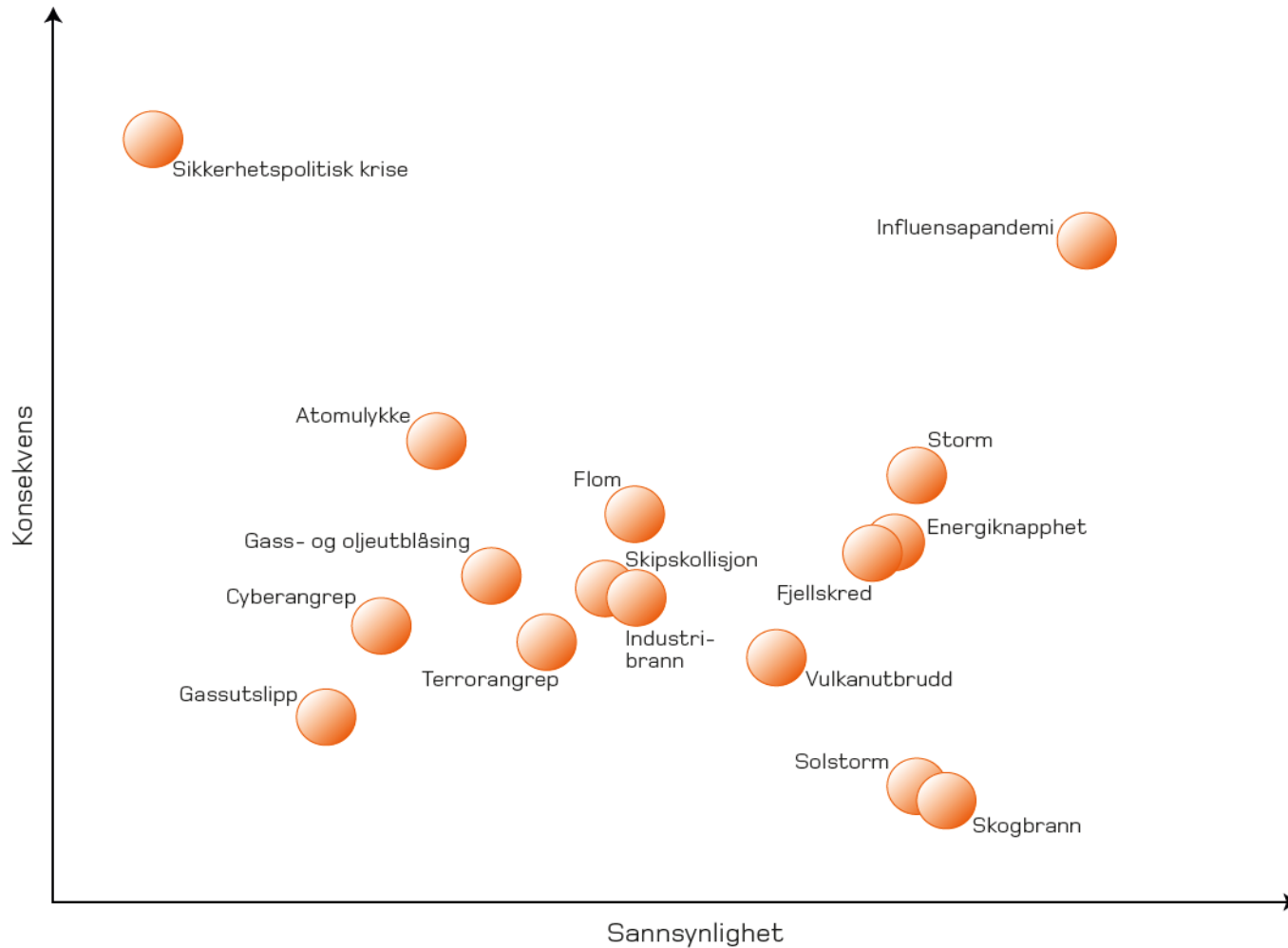


## Remarks

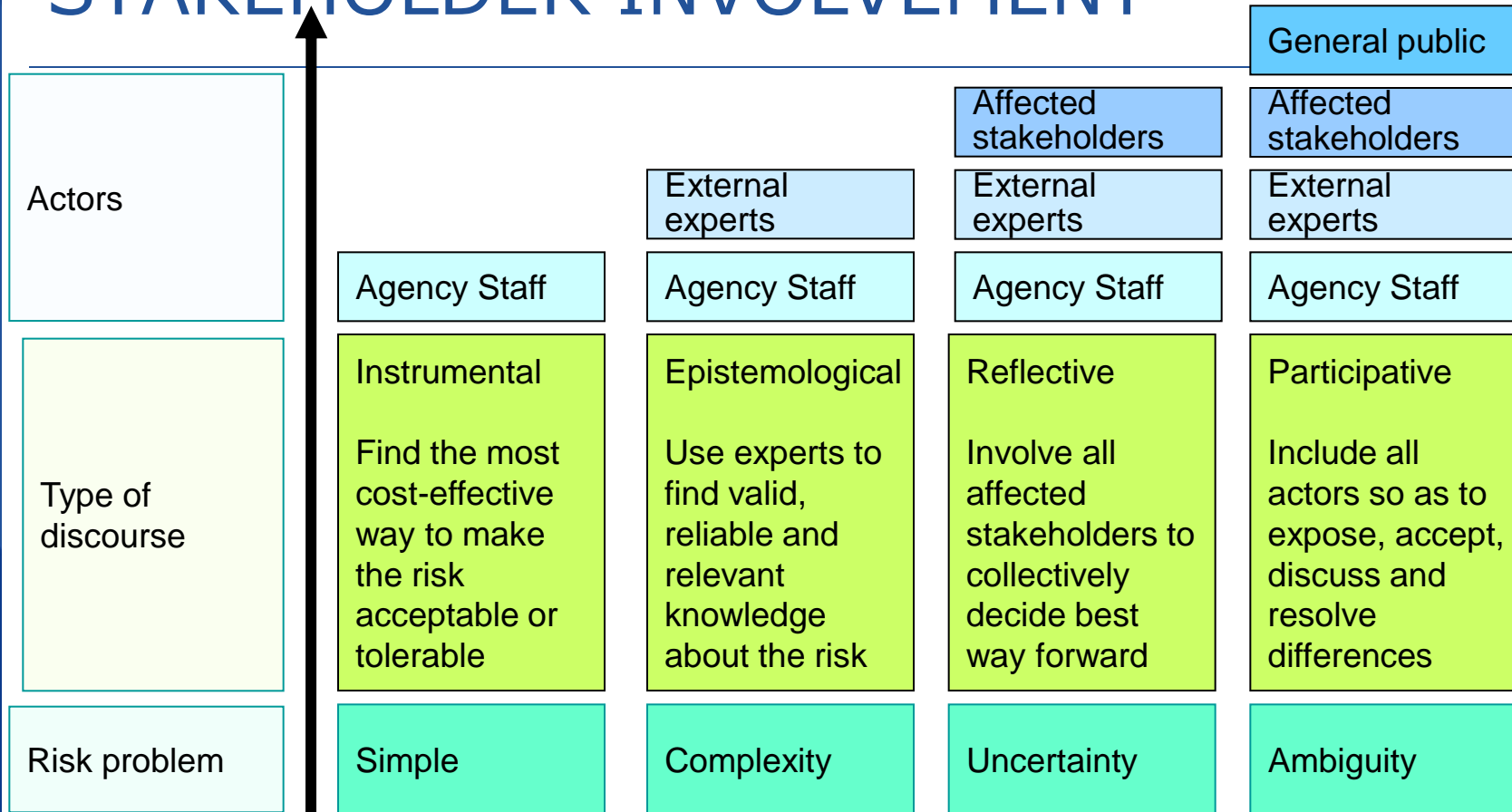
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- The security challenges that both facing the petroleum industry and the aviation sector have shown that traditional socio – technical approaches not always are appropriate.
- Following the definitions of safety and security there are arguments in favour of also dividing the organisational instruments
- However, and as underlined by Cambacedes & Chaudet (2010), there may be something to win by searching for how to create and develop security/safety regimes that can work together within the same organisational context, not being competitive and not being in conflict with each other.

# Nasjonalt Risikobilde 2012



# STAKEHOLDER INVOLVEMENT



As the level of knowledge changes, so also will the type of participation need to change

## Noen konklusjoner – fremtidige utfordringer

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- **Viktigst – politiske og etiske utfordringer**
  - Hvor god beredskap er god nok? Hvordan foreta gode organisatoriske grensedragninger mellom safety og security
  
- **Arbeidet med beredskap og sikkerhet er hendelsesstyrt, ikke minst blitt klart etter Gjørø og kanskje også InAmenas?**
  - Sikkerhetstiltak med datostempling?
  
- **Beredskapen har klassiske svakheter:**
  - Evnen til å planlegge det utenkelige er liten
  - Samordning mellom ulike nivåer og sektorer svikter når den blir satt på prøve (pandemi, tsunami, terrorisme.....)
  - Beredskap for å håndtere kryptende kriser er lav