Solutions?

FInd often that maybe we in HF confuse the vision with the near future.
The vision that we have ROCs that montitor numerous vessels. A spot on the horizon.
We think: OMG hos is this ever going to work?
Maybe we need to stop this?
The engineers build thing step by step to see how it works.
Maybe that is something on us (HF people) that we tend to be tech pessimists rather than tech optimists like the engineers.
Aware of the Hype curve.
Like the ship bridge development.
Maybe the same will happen with the autonomous shipping.

How can we close or mitigate the gap in knowledge and practices going forward?

Having human on the loop.
Making sure that the end-user is included.
Meaningful lhuman control/human on the loop.
Research perspective.
Starting to have project looking into this.
Design for meaningful work.

Highlighting best practises.
Engineers are very into solutions, HF are also into the processes and solutions.

We DO have the knowledge and we DO have the standards and priciples etc.
Is that where the problem is? Or is it that emerging tech are not a standardised?
Is knowledge/priciples and methodologies where the gap is?

Forced into the way of thikning -- the natural way
There is so much going on.
Academic and other contextual work being done.
DO the others outside the HF field understand Human in the Loop?
Do we share the knowledge?

A MUTUAL understanding that is it a part of the work we do.

Summarize: Knowledge is there (baseline) , transfer of knowledge.

We have all this knowledge, but is not applied.

THe rewuirements are differetn in different industries, but there a much of the same things.
Have the huge amount of knowledge, but not adopted or aquired.

What/ where is the biggest gap?

Technological competence (hydrogen, battery, etc.)

Gap between practice and preach

If HF are truly successful it will not exists as it will be a part of engineering.

HF must be included in all steps.

Threat of being reactive and catching up to state of art engineering/tech (i.e. dont have understanding/competence) and not proactive

We live in a tech driven society.
HF role in this: aviation/ oil and gas/ maritime.
The case for HF involvement is doable. Pilots etc. risk of large amount of fatalities are real.
What are the major accident risk related to controlling a windfarm?
Knowledge gap?
Emerging tech and we don't really know what he consequenses are or what the risks are.

That HF is not something that is to be singled out.
It has to be made clear to people.

Example: Folkehelsen
Must be inlcuded in everything. A way of thinking.
It is ABOUT the PEOPLE.

Follow the big lines. Intergrate the results in the activities.
You can only get so far?

Example: Not much anchoring in the company. Tried to get support from management,

Unified Bridge example:
Need support from management.

CRIOP method:
Bring together people form differernt diciplines.

Whenever there is a PR moment and the Prime Minister comes. The design is what they look at.
Management when starting the next project:
Do we need this? What does it cost?

What should we do?

Develop design principles

Develop new methodologies?

Standards or Requirements?

Who and how?

highlighting best practises?

Identify key stakeholders

Human on the loop - the capability for human intervention during the design cycle of the system and monitoring the system's operation

Include HF into all QA processes. Not a separate process, but integrated into the already excisting processes.
Product Lifecycle Managment
Product Introduction Lifecycle Management

Possible solution: simulation as a HF-tool

Example FORD: People (end user) will ask for a faster horse and not a car.
Supporting the complimentary aspect.
From a Human Centred Perspective: How do you extract meaningful data from asking people about systems that do not exist.

HF professionals and engineers are **complimentary** of eachother.
We need eachother.
Mutual partners in this work.
We end up producing ace tech, but the tech.
Example: ECIDS lots of work to be done still.
Acknowledging that we are complimentary of eachother.
Closing the gap.

Introduction to group work

Context

- New value chains and business cases
- New technology, autonomy, digitalization, remote operations
- Recent advances within the field (HOP, safety II, Human-Machine teaming, etc.)

- **Do we have a gap when it comes to:**
- Principles?
- Methods?
- Standards?
- Requirements?
- General issues?



Møtesammendrag				
Totalt antall deltakere	7			
Møtetittel	Workshop HFC			
Start tidspunkt for møtet	20.10.2021, 13:40:20			
Sluttidspunkt for møte	20.10.2021, 14:37:08			
Møte-ID	099146de-ab7d-4c3c-8631-09ff774ea279			
Fullt navn	Tidspunkt for å bli m	E-post	Rolle	Deltaker-ID (UPN)
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