

Please consult the agenda to “synchronise” the chat comments with the presentations.

- 12:00:37 From Vinícius Bigogno-Costa To Everyone : good day, everyone!
- 12:03:33 From patricia.wimmer To Everyone : yes
- 12:03:36 From Moacyr Cardoso To Everyone : ok
- 12:10:53 From Ida Maria To Everyone : Voiceover went
- 12:11:03 From patricia.wimmer To Everyone : no sound
- 12:11:19 From James Norman To Everyone : lost sound
- 12:13:27 From David Slater To Everyone : Have you got sound
- 12:13:37 From Vinícius Bigogno-Costa To Everyone : nop
- 12:14:28 From stevenshorrock To Everyone : OR maybe go straight to discussion
- 12:14:32 From Abhijith Balakrishnan To Everyone : Yes, Safety I and Safety II
- 12:16:14 From David Slater To Everyone : Apologies for the glitch!
- 12:16:23 From Warner Van der Veer To Everyone : Kerry, could you share yr movie (or the ppt with the movies embedded) )because I think it is a great way to explain safety II to my non-safety colleagues
- 12:17:52 From Ida Maria To Everyone : I´ve raised a hand
- 12:17:58 From Arthur Dijkstra To Everyone : @ Kerry. Risk is increased but often also production.
- 12:20:14 From Abhijith Balakrishnan To Everyone : What are "unsafe" behaviours?
- 12:20:23 From Warner Van der Veer To Everyone : I agree Arthur! People do what they do because of what happens to them when they do it. So getting the job done quicker is a strong incentive
- 12:20:38 From stevenshorrock To Everyone : I´m not sure safe and unsafe behaviours are a useful dichotomy, and adaptations can have all sorts of short and long term consequences
- 12:22:01 From Ida Maria To Everyone : Indeed - it only becomes "unsafe" in hindsight
- 12:22:42 From Ida Maria To Everyone : hence "undafe" in quotation marks
- 12:22:45 From Ida Maria To Everyone : unsafe
- 12:23:06 From Florian Heigl To Everyone : you could call it „classified as safe“
- 12:24:19 From Vinícius Bigogno-Costa To Everyone : great question, Ida! going further, even a "safe" behavior may become unsafe, for instance if you go too strict on work as prescribed and are unable to adjust your prescription to your environment
- 12:25:36 From Vinícius Bigogno-Costa To Everyone : \*unable or unwilling to adjust, for "I'm doing just as I'm told to do"
- 12:25:41 From Mikkel To Everyone : With the notion of safety being subjective - e.g. the truck drivers statement “he perceived the situation as safe”. If the driver had a notion of “sustainable safety” - and he was trailgating to minimize the drag - using less fuel ect. and being effective - how would be deal with such notion?
- 12:25:55 From Arthur Dijkstra To Everyone : @Kerry Your model works as a very simple introduction, but we should realize that the model is too simple for a complete understanding of Safety-II (and safe or unsafe behaviour)
- 12:26:26 From Abhijith Balakrishnan To Everyone : Would this subjectivity in safe and unsafe behaviours make any processes or procedures trying t control behavior be irrelevant? Don't have these processes at all?
- 12:26:44 From Helen Rawlinson To Everyone : I think this highlights the normal safety practice (to mostly look at work when an unwanted outcome occurs). Your video will work well as an intro to the thought processes for many who are entrenched in 'Safety I' cultures.
- 12:27:47 From Shannon Hamm To Everyone : Ida, it sounds like you're talking about compliance rather than safety
- 12:28:33 From Steve Roesli - SwissALPA To Everyone : Mikkel: „how would be deal with such notion?“ Our company manages this by sharing information and training. Not always successfully but we see

changing behavior.

- 12:28:41 From Ida Maria To Everyone : it was - at the time, defined by "the system" as a "safe behaviour" to NOT run, as it increased the likelihood of injury....
- 12:29:06 From Ida Maria To Everyone : my point is that a "safe behaviour" cannot be defined by default
- 12:29:34 From Michael Behm To Everyone : so, all adaptability outside of the prescribed driving rule is perceived as bad ?
- 12:29:54 From Helen Rawlinson To Everyone : Once there is a basic understanding, you can then work on language and helping people to avoid reverting to a compliance mindset when they are learning/ observing 'normal' work/ work as done.
- 12:30:17 From Ida Maria To Everyone : you could argue that going out in the world is an unsafe behaviour - that moment you expose yourself to the world - but you choose to do so, because that is how you reap benefits
- 12:30:55 From Warner Van der Veer To Everyone : @steve Roesli. behavioural science learns us that information and training are Antecedents that invite the desired behavior once. Only the Consequences of the behavior make a person increase or decrease the behavior. This is basic behavioural science
- 12:31:43 From Michael Behm To Everyone : Which outcome is more negative? Getting divorced or remaining in an unhappy marriage?
- 12:31:48 From Margriet Bredewold To Everyone : Good point, safe behaviour cannot be defined, possibly a different way of making the point that risk free behaviour doesn't exist. Safe is always to a certain degree...
- 12:32:09 From Brent Sutton To Everyone : Did the driver believe he was bad and wanting to cause an accident, or was he trying to be as effective and efficient in the system he operates in?
- 12:34:02 From Steve Roesli - SwissALPA To Everyone : @Warner Van der Veer: yet, we (internally in the company) see constant change without consequences. At least not „consequences“ of the punitive kind.
- 12:34:13 From Annette Gebauer To Everyone : I think this issue and how to explain it to managers is key to make safety II happen in practice....
- 12:35:04 From Annette Gebauer To Everyone : It is not laissez faire but it is to use rules in a more intelligent (and from a constructivist perspective...)
- 12:36:03 From Vinícius Bigogno-Costa To Everyone : great point, Annette!
- 12:36:14 From Arthur Dijkstra To Everyone : Maybe the model of Kerry is suitable for the context he applies it to, but not to other contexts where other factors as work environment are more under the influence of the organisation.
- 12:44:51 From Warner Van der Veer To Everyone : @Steve Roesli. It is key to start organising positive reinforcement (rewards) for desired behaviours in an explicit way.
- 12:45:24 From Annette Gebauer To Everyone : Thank you for your contribution. My question is: With whom did you do these analysis? Who was involved? Who learned how?
- 12:46:17 From Warner Van der Veer To Everyone : <https://www.aubreydaniels.com/about-adi/science>
- 12:47:08 From Ida Maria To Everyone : forgive me if I am misunderstanding this, but how is this different from standard linear predictive methodologies, assuming that failure takes place in a relatively linear and deterministic ways?
- 12:47:27 From Ida Maria To Everyone : way. Typo
- 12:48:32 From Mike Boyle To Everyone : Perhaps someday to answering your question on screen now?
- 12:48:53 From Ida Maria To Everyone : not really, no
- 12:51:11 From Mike Boyle To Everyone : Let's discuss in a moment - I have a slide that may illustrate from linear to complex systems.
- 12:51:56 From Annette Gebauer To Everyone : Isn't the control framework somehow enforcing the idea of a control oriented mode/mechanical way of organizing?

12:52:01 From Josué Maia França To Everyone : @Mike thank for the presentation! Could you say to us, please, in which part of your process occurs the learning from work as done? Is this in the Credible Failure Modes (CFM)?

12:52:51 From Margriet Bredewold To Everyone : Why do we want to pre-define Good and Bad (preferred, safe, whatever term-) behaviours in such a way? Are we in general, not working with experts, professionals and in many ways sensible in their job/role/profession? Should we not make a little more effort in understanding performance rather than prescribing it?

12:53:17 From Ida Maria To Everyone : good point, Margriet!

12:53:20 From Mike Boyle To Everyone : Business inputs validated by operational personnel. Much of the learning is by senior managers realising that they do not have good signal about these.

12:53:25 From Arthur Dijkstra To Everyone : It seems to me like a complicated type of approach as opposed to a complexity type of approach. e.g. the number of failure modes can not be counted (calculated) in a complexity approach. A fault-tree approach helps to create a some shared understanding of all parties involved but not how safety is created.

12:53:45 From Annette Gebauer To Everyone : How did you work with the working level? How are they participating, working with the framework?

12:53:52 From Brent Sutton To Everyone : Well said Margriet:)

12:54:00 From David Slater To Everyone : Barriers?

12:54:35 From Mike Boyle To Everyone : Multi-day workshops - over 30 global so far

12:54:42 From Arthur Dijkstra To Everyone : A control model should show a loop, not some sequential steps, maybe that should be more obvious to your model.

12:55:05 From stevenshorrock To Everyone : I'm interested to hear how this relates to the core tenets of Safety-II (or systems thinking and complexity science more generally).

12:56:02 From Richard Knowles To Everyone : Very nice piece of work involving the whole system.

13:00:58 From stevenshorrock To Everyone : Nothing more for me

13:02:35 From Margriet Bredewold To Everyone : Thank you Mike, 'setting people up to succeed'

13:12:26 From Brent Sutton To Everyone : Interesting:)

13:24:10 From Richard Bye To Everyone : @Riccardo, Is the coding tool bespoke software or is it commercially available? Is it based on grounded theory or similar principles?

13:29:03 From Richard Bye To Everyone : It would be really interesting to understand how the method amplifies the weakest signals if code frequency is used to classify the insight.

13:30:54 From Mikkel To Everyone : @Riccardo: is the data decode for a transcript or audio recorded interviews?

13:31:30 From Annette Gebauer To Everyone : I like the idea of making it practical and to train internal people as interviewers! Can you share some experience how that worked?

13:33:09 From Michael Behm To Everyone : very interesting methodology and study - thank you. is there a paper forthcoming?

13:33:34 From Abhijith Balakrishnan To Everyone : Riccardo, I enjoyed your presentation. Would you have a whitepaper?

13:34:34 From stevenshorrock To Everyone : Great overview, Riccardo

13:35:06 From mariapapanikou To Everyone : Great work.

13:37:42 From Bertha Quintero To Everyone : Excellent Work

13:38:14 From Milena BOWMAN To Everyone : Richardo, thanks so much for the presentation! What do you think could be as a side effect longer term benefit of people developing interviewing skills?

13:39:04 From Gitte Furdal Damm To Everyone : Really interesting, thank you Riccardo!

13:39:27 From Brent Sutton To Everyone : Thank you Riccardo:)

13:40:46 From Riccardo Patriarca To Everyone : I'll try to answer some of the questions in chat since unluckily I won't be able to join the thematic discussion for another overlapping meeting.

- 13:41:52 From Steve Roesli - SwissALPA To Everyone : The .pdf file relating to this presentation seems to be faulty. At least, I can't open it.
- 13:42:43 From Josué Maia França To Everyone : I can't open the MASS presentation as well. Maybe there is a problem in the source.
- 13:42:54 From Riccardo Patriarca To Everyone : @Richard: The coding is done through a commercial software (you can imagine licensing about 500€ per analyst per year). Yes it is based on GT (see NVIVO, ATLAS, QRA for valuable examples)
- 13:44:32 From Riccardo Patriarca To Everyone : @Mikkel: we have mixed entries (so far mainly coming from transcript): Even though we have successfully experimented this free MS tool and planning to make it more usable in the next rounds:  
<https://support.microsoft.com/en-us/office/transcribe-your-recordings-7fc2efec-245e-45f0-b053-2a97531ecf57>
- 13:45:47 From Riccardo Patriarca To Everyone : @Michael and @Abhijith, yes it is. We will promote in EUROCONTROL's channels and of course our personal professional social media (me, Tony Licu and Joerg Leonhardt)
- 13:46:43 From Richard Bye To Everyone : Thanks Riccardo!
- 13:46:52 From Pedro Ferreira To Everyone : @Riccardo@Richard, for addressing similar needs, I'm using Atlas.ti with interesting outcome
- 13:47:16 From Riccardo Patriarca To Everyone : @Milena: so far what we have experimented and received as feedback from interviewers is their larger involvement and comprehension of some nuances and trade-offs. We believe that this could be an added value for the entire organization.
- 13:47:46 From Arthur Dijkstra To Everyone : At the highest level automation; I hope the human is still in the loop to determine the destination of the ship. In other words the human will always be in the loop but at different levels. Thus maybe in or out the loop is too simplistic, but the question should be, to what degree is the human in the loop?
- 13:48:46 From Riccardo Patriarca To Everyone : thanks for positive comments and interesting questions. feel free to drop me a line if I may give you any further clarification. Thanks.  
riccardo.patriarca@uniroma1.it
- 13:52:21 From Vinícius Bigogno-Costa To Everyone : hi, Alexandros, how do you manage to translate these informations into
- 13:52:30 From Vinícius Bigogno-Costa To Everyone : ... requirements for the vessel design?
- 13:54:43 From Josué Maia França To Everyone : Alexandros, please, once FRAM help us to understand how the work is done, highlighting human interactions, do you think this methodology will help to understand the system without human presence?
- 13:55:15 From Josué Maia França To Everyone : \*highlighting
- 13:57:42 From Vinícius Bigogno-Costa To Everyone : thank you, Alexandros, very interesting presentation! I think there's a real challenge into designing systems using Safety-II principles, especially if you're design such innovative and data is not that much available, but your work seems to get a good grasp from as already done operations of man-operated vessels
- 14:03:25 From Pam Walaski To Everyone : This is an awesome slide - so true Annette!
- 14:04:23 From Arthur Dijkstra To Everyone : Thank you Annette, very useful to make your ontological and epistemological position explicit. I think this should be done more often.
- 14:05:25 From Richard Bye To Everyone : Yes Arthur, completely agree.
- 14:05:59 From Le-coze To Everyone : I like your emphasis and vocabulary choice of "collective patterns" Annette
- 14:09:28 From Arthur Dijkstra To Everyone : Very good to mention the updating of the 'model of failure'. Attention for double and triple loop learning is important.
- 14:10:41 From Carolline Day To Everyone : Vicious cycle indeed! full of heuristics and biases...
- 14:13:40 From James Norman To Everyone : Outstanding adaptation and evolution from Hudson/Parker
- 14:14:35 From Le-coze To Everyone : perhaps a modification of the scale type of the visual would make

sense to stress the differences?

- 14:16:03 From Le-coze To Everyone : "ladder type" of visual I meant (sorry) to avoid the linear view of the problem
- 14:18:19 From Vinícius Bigogno-Costa To Everyone : @Le-coze I understand the concern, but I think the "ladder type", although linear, seems more straightforward to communicate the concepts to a broader audience, especially if you're trying to "sell" the idea to upper-management
- 14:20:41 From Le-coze To Everyone : Thank you Vinicius, I agree I just wanted to encourage more visual translation of the metaphors of "loops", "patterns" which seem to be important to Annette ...
- 14:22:02 From Abhijith Balakrishnan To Everyone : Carsten has written a book "The First Rule of Safety Culture" that sort of summarises the various research available on the subject in a very readable language.
- 14:22:34 From Vinícius Bigogno-Costa To Everyone : Yes, totally agree with you, it would be great to see a representation that captured these details
- 14:23:03 From Ole Brinck To Everyone : @Annette: Not having a continuous workforce but for every operation up to 75 % of people are new/different. How would you approach such a composition different Annette? And the onboarding process is very short also :-)
- 14:27:10 From Richard Bye To Everyone : Does learning from small events help with psychological safety?
- 14:30:53 From Abhijith Balakrishnan To Everyone : Welcome. I think it was published last month
- 14:30:57 From Vinícius Bigogno-Costa To Everyone : @Annette: thank you for bringing your perspective on the topic, I personally face that in my research Project, which looks at Project management from an organizational perspective. Did you approach management-level operations, and how does it differ from approaching tactical and operational level?
- 14:31:34 From Maria Lundahl To Everyone : Thank you @Anette, very interesting!
- 14:31:39 From patricia.wimmer To Everyone : Why is it more difficult Annette to look at normal work?
- 14:32:56 From Neil Spenceley To Everyone : Thanks Annette. Great presentation. Do you have a ref for the 5 culture levels?
- 14:33:03 From Le-coze To Everyone : Very interesting 'organisational learning' design Indeed Annette
- 14:33:04 From Erik Hollnagel To Everyone : It is not more difficult to do, but it is perhaps difficult to get used to doing it.
- 14:33:08 From Brian Teske To Everyone : Than you @Annette, very interesting
- 14:33:41 From Gitte Furdal Damm To Everyone : Thanks for a great presentation, Annette!
- 14:33:59 From Birgitte Johansen To Everyone : Very interesting and insightful, Annette - thank you!
- 14:34:17 From Arthur Dijkstra To Everyone : @Annette: Interesting work I think it is very interesting to hear from the different people how a challenging event was a success. I assume perspectives will conflict and these conflict will lead to new insights for the participants.
- 14:34:44 From Richard Knowles To Everyone : Annette, This is very good work. You'll find my talk tomorrow interesting since it relates to your work.
- 14:34:47 From Ida Maria To Everyone : @Neil - I think it is basically an adaptation of Fleming's basic safety culture maturity model - looks that way
- 14:35:21 From Warner Van der Veer To Everyone : Thanks Annette. Very interesting to the step from theory into the practice
- 14:37:36 From Michael Behm To Everyone : Very good presentation. Great to see the theory moving to practice. Thank you.
- 14:38:21 From jolow To Everyone : Annette should give a masterclass only on this subject.
- 14:42:01 From Jim Marinus To Everyone : Thank you Annette - appreciate the ways you simplify concepts
- 14:42:34 From Richard Bye To Everyone : @Neil looks like the foundation model is a bit like the work done after Piper Alpha (e.g. Hudson, P. (2007). Implementing a safety culture in a major multi-national. Safety Science, 45, 697-722.) But this goes a lot further, and the fusion of learning teams, culture change, etc. is extremely interesting and sophisticated

14:43:00 From Neil Spenceley To Everyone : Thankyou

14:48:21 From Ida Maria To Everyone : @Neil there´s something historical that might be of interest  
<https://www.hse.gov.uk/research/otopdf/2000/oto00049.pdf>

14:50:05 From Mikkel To Everyone : @annette: thanks. Though the large companies have more money to invest - is the size (number of employees) not a real challenge?

Is it not easier to change ways of thing in smaller companies/ teams - what are your experience on this?

14:51:09 From Jim Marinus To Everyone : Getting into the field and listening?

14:52:43 From Josué Maia França To Everyone : @Annette thank for the presentation! Could you say to us, please, besides the interview, how the learning from work-as-done happens in your research? Is there also observation or other means to understanding that?

14:53:23 From Margriet Bredewold To Everyone : still looking for source, had it saved in my computer

14:55:53 From Gitte Furdal Damm To Everyone : Some insights for me, that we moved from talking about unsafe/safe behaviour (the individual) going to learning about weak signals, and finally the hearing about the collective behaviour. Thank you for an interesting day!

14:56:40 From Richard Bye To Everyone : @Richard, I think that your example of fractal patterns in behaviour is really interesting. Do you have any more information/research about the repetition at different levels of organisations?

14:58:33 From James Norman To Everyone : habituation