

De regulering van artificiële intelligentie

Een stand van zaken en enkele aandachtspunten inzake
buitencontractuele aansprakelijkheid

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Tesla driver dies in first fatal crash while using autopilot mode

The autopilot sensors on the Model S failed to distinguish a white tractor-trailer crossing the highway against a bright sky



Joshua Brown, the first person to die in a self-driving car accident. Photograph: Facebook

The first known death caused by a self-driving car was disclosed by [Tesla Motors](#) on Thursday, a development that is sure to cause consumers to second-guess the trust they put in the booming autonomous vehicle industry.

The 7 May accident occurred in Williston, Florida, after the driver, Joshua Brown, 40, of Ohio put his Model S into [Tesla's autopilot mode](#), which is able to control the car during highway driving.

South Korean woman's hair 'eaten' by robot vacuum cleaner as she slept

The woman was sleeping on the floor of her home when the robotic cleaner ingested her hair leaving her in agony



Woman at her house in Chanwon, southeast South Korea after her hair was sucked

Robotic surgery linked to 144 deaths in the US

22 July 2015



Google self-driving car collides with bus in California, accident report says

If it is determined the Google vehicle caused the crash, it would be the first time one of its SUVs caused an accident while in autonomous mode



Google self-driving car to navigate some sandbags when it collided with a public bus. Photograph:

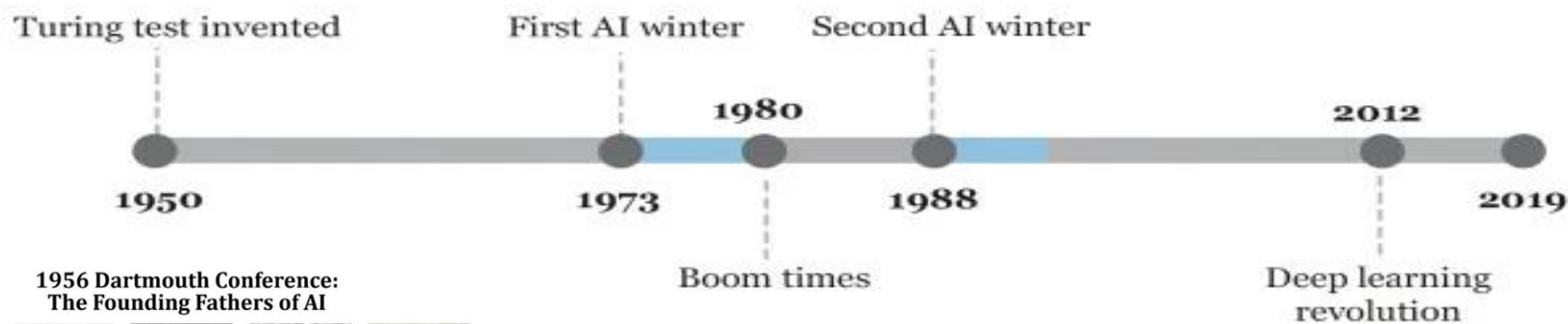
Google self-driving car has collided with a public bus in Mountain View,



- Wat is AI?
- Regulering van AI
- AI en BCA
- Wat brengt 2022 en 2023?

Wat is AI?

- AI zomers en winters



1956 Dartmouth Conference:
The Founding Fathers of AI



Bron: <https://towardsdatascience.com/history-of-the-first-ai-winter-6f8c2186f80b>

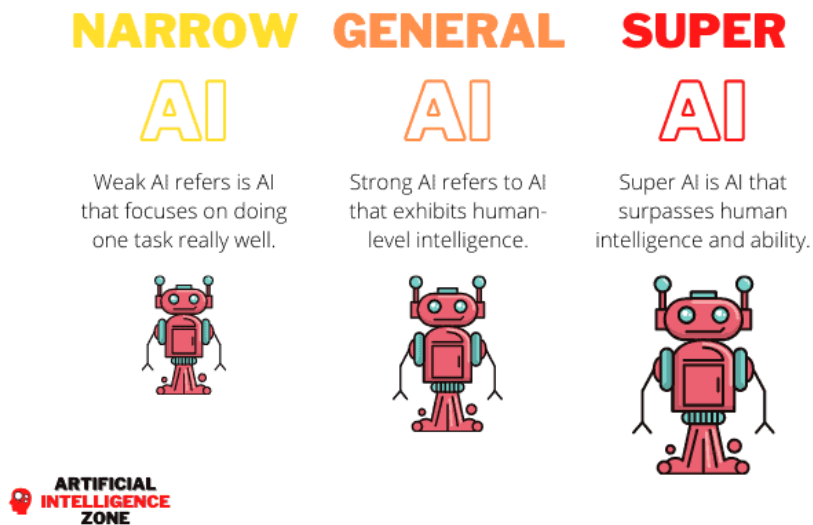


AI is niet nieuw



Wat is AI?

- Niet één aanvaarde definitie
- AI < data wetenschappen < computerwetenschappen

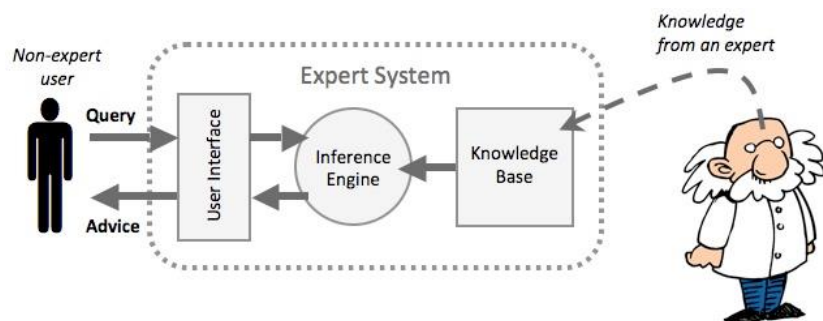


AI-systemen zijn **gericht/zwak**

Bron: <https://artificialintelligencezone.com/what-is-general-or-strong-ai-in-simple-terms/>

Wat is AI?

- AI betreft veel **velden** en gebruik in **veel sectoren**
- **Twee grote stromingen**

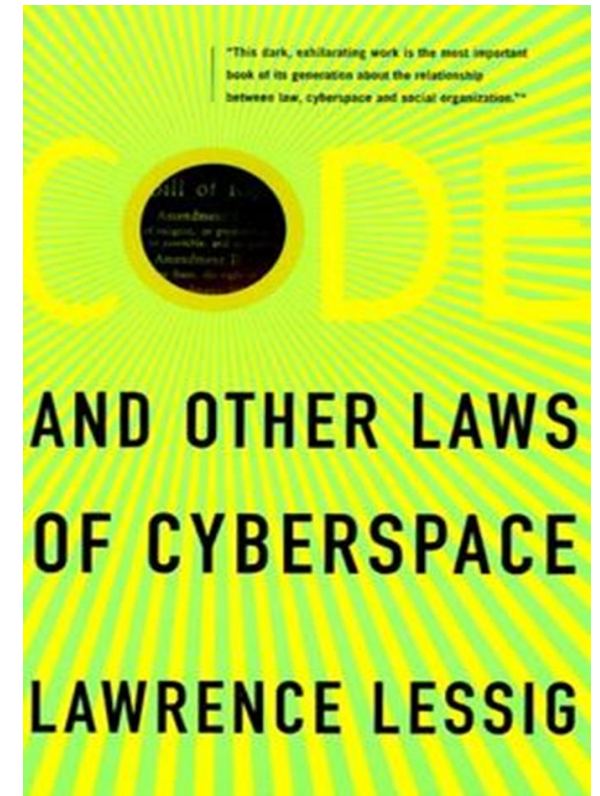
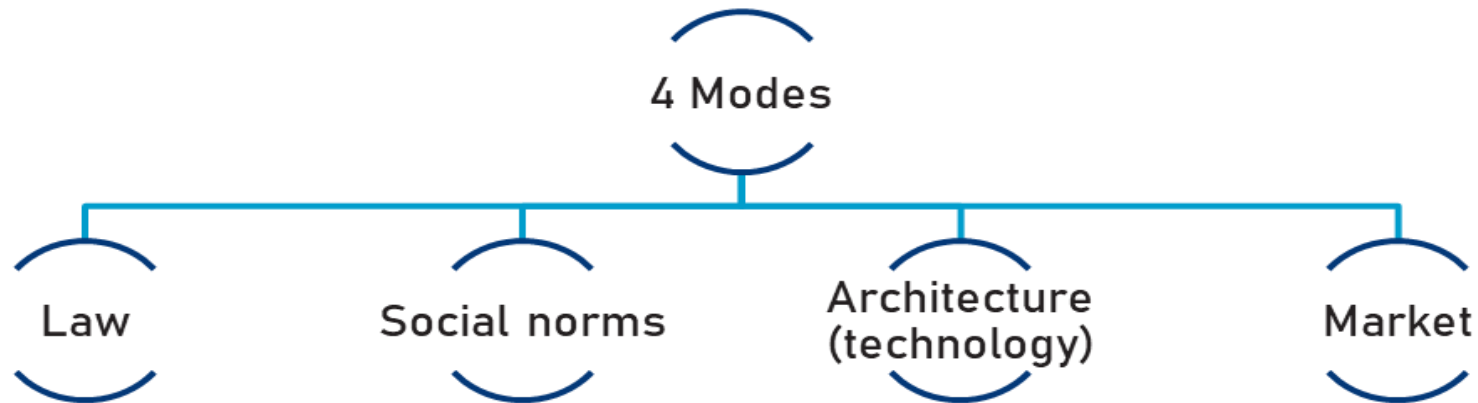


Kennis-gebaseerd (*symbolic AI*)
top-down



Data-gedreven (*machine learning*)
bottom-up

Regulering van AI



Regulering van AI

- Bestaande regelgevende kaders



- Voorstel EU Verordening AI



AI opereert niet in een vacuüm

- Bestaande ethische kaders

- AI HLEG



REQUIREMENT #1 Human Agency and Oversight

AI systems should support human agency and human decision-making, as prescribed by the principle of respect for human autonomy. This requires that AI systems should both: act as enablers for a democratic, flourishing and equitable society by supporting the user's agency; and uphold fundamental rights, which should be underpinned by human oversight. In this section AI systems are assessed in terms of their respect for human agency and autonomy as well as human oversight.

Glossary: AI System; Autonomous AI System; End User; Human-in-Command; Human-in-the-Loop; Human-on-the-Loop; Self-learning AI System; Subject; User.

Human Agency and Autonomy

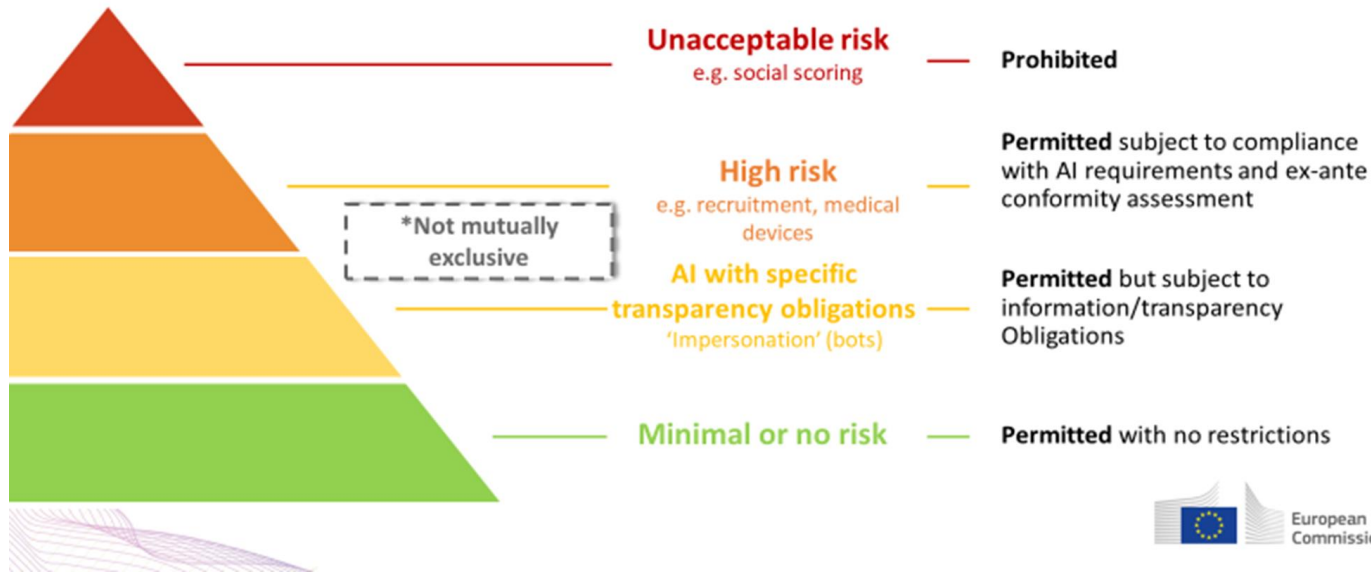
This subsection deals with the effect AI systems can have on human behaviour in the broadest sense. It deals with the effect of AI systems that are aimed at guiding, influencing or supporting humans in decision making processes, for example, algorithmic decision support systems, risk analysis/prediction systems (recommender systems, predictive policing, financial risk analysis, etc.). It also deals with the effect on human perception and expectation when confronted with AI systems that 'act' like humans. Finally, it deals with the effect of AI systems on human affection, trust and (in)dependence.

- Is the AI system designed to interact, guide or take decisions by human end-users that affect humans¹⁸ or society?
 - Could the AI system generate confusion for some or all end-users or subjects on whether a decision, content, advice or outcome is the result of an algorithmic decision?
 - Are end-users or other subjects adequately made aware that a decision, content, advice or outcome is the result of an algorithmic decision?
- Could the AI system generate confusion for some or all end-users or subjects on whether they are interacting with a human or AI system?
 - Are end-users or subjects informed that they are interacting with an AI system?
- Could the AI system affect human autonomy by generating over-reliance by end-users?
 - Did you put in place procedures to avoid that end-users over-rely on the AI system?
- Could the AI system affect human autonomy by interfering with the end-user's decision-making process in any other unintended and undesirable way?
 - Did you put in place any procedure to avoid that the AI system inadvertently affects human autonomy?
- Does the AI system simulate social interaction with or between end-users or subjects?

- UNESCO aanbeveling (2021)

Regulering van AI

A risk-based approach to regulation



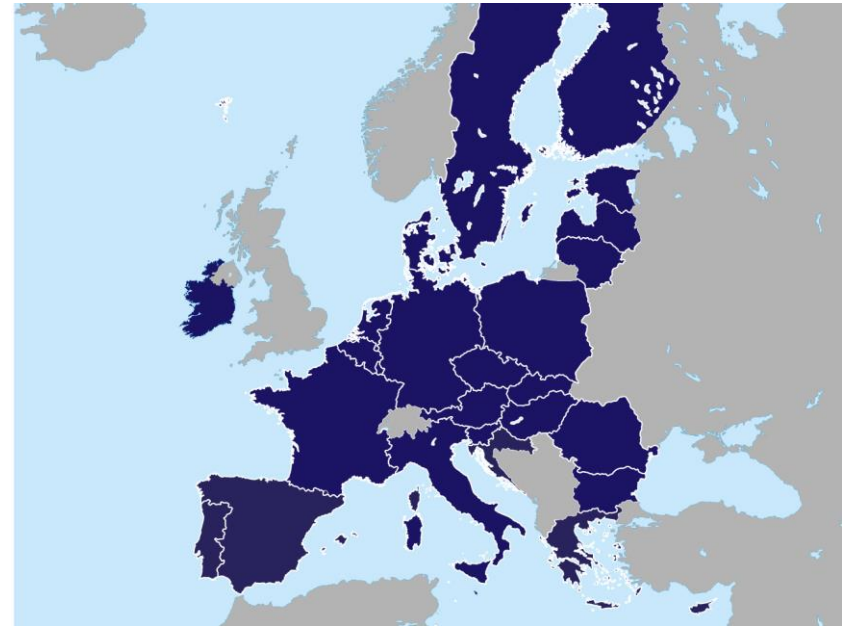
Voorstel EU Verordening AI
(april 2021)

Belang BCA?

2022: Raad en EP

AI en BCA – Algemeen

- BCA (**nationaal**) en AI (**transnationaal**)



AI en BCA – Algemeen

Algemeen

- Februari 2017: EP [Recommendation](#) on Civil Law Rules Robots
- Maart 2018: Expert Groups PLDF and NTF
- November 2019: NTF [report](#) 'Liability for Artificial Intelligence and other emerging digital technologies'
- Februari 2020: [Report Safety & Liability AI](#)
- Juli 2020: JURI [Study](#) Liability and AI
- Oktober 2020: [EP Recommendation](#) civil liability AI operators
- Publieke consultatie aansprakelijkheid en AI (tot januari 2022)

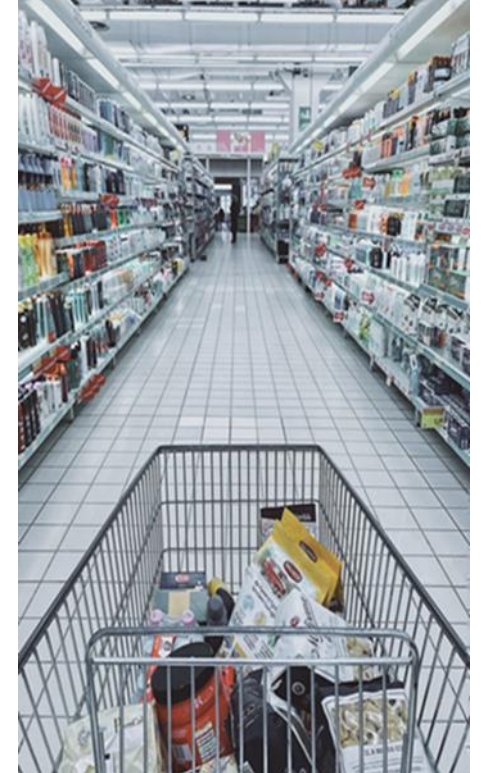
AI en BCA – Foutaansprakelijkheid



- **Blijvend belang** (vangnet)
- Veelheid **actoren**
- **Schending specifieke gedragsnorm**
 - nood aan technische en veiligheidstandaarden/normen
 - belang AIA en Voorst. Productveiligheidsverordening
- **Algemene zorgvuldigheidsnorm**
 - belang in AI context
 - vereiste redelijke voorzienbaarheid van schade ↔ autonomie
 - complex voor producent en operator
 - gebruik zelfrijdende wagen?

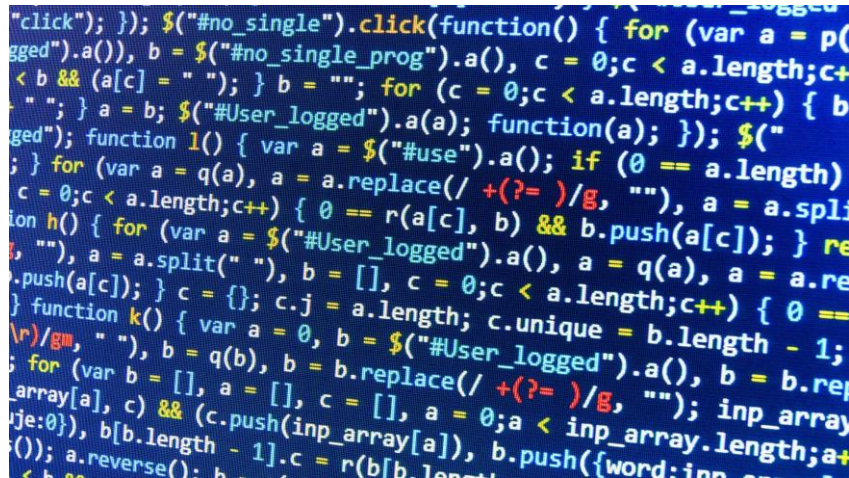
AI en BCA – Productaansprakelijkheid

- **Wet/Richtlijn Productaansprakelijkheid**
- Producent aansprakelijk voor schade veroorzaakt door **gebrek in product**
 - software / algoritme = product?
 - wanneer is AI gebrekkig?
 - verweermiddelen

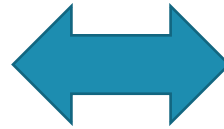


AI en BCA – Productaansprakelijkheid

- Art. 2 RPA: **product** = roerende goederen (+ elektriciteit)
- Software als dienst?
- Software/ algoritme als product?



```
"click"); }); $("#no_single").click(function() { for (var a = p(
gged").a()), b = $("#no_single_prog").a(), c = 0; c < a.length; c+
< b && (a[c] = " "); } b = ""; for (c = 0; c < a.length; c++) { b
" "; } a = b; $("#User_logged").a(a); function(a); }); $("
ged"); function l() { var a = $("#use").a(); if (0 == a.length)
; } for (var a = q(a), a = a.replace(/ +(?= )/g, ""), a = a.spli
c = 0; c < a.length; c++) { 0 == r(a[c], b) && b.push(a[c]); } re
ion h() { for (var a = $("#User_logged").a(), a = q(a), a = a.re
, ""), a = a.split(" "), b = [], c = 0; c < a.length; c++) { 0 ==
.push(a[c]); } c = {}; c.j = a.length; c.unique = b.length - 1;
} function k() { var a = 0, b = $("#User_logged").a(), b = b.re
(r)/gm, " "); b = q(b), b = b.replace(/ +(?= )/g, ""); inp_array
array[a], c) && (c.push(inp_array[a]), b.push({word:inp
je:0})), b[b.length - 1].c = r(b[b.length
)); a.reverse(); b = r(b[b.length
```



- Art. 2 WPA: elk lichamelijk roerend goed

AI en BCA – Productaansprakelijkheid

- **Rechtmatige veiligheidsverwachtingspatroon** (*consumer expectations*)
 - redelijkerwijze voorzienbare gebruik
 - tijdstip van inverterstelling
 - presentatie van het product
 - standaarden
- **Moeilijke toepassing in AI-context**
 - niet evident voor AI: innovatief, vergelijking mens/technologische alternatieven, AI-eigenschappen
 - hoge veiligheidsverwachtingen in bepaalde sectoren
 - 'referentie' AI-systeem

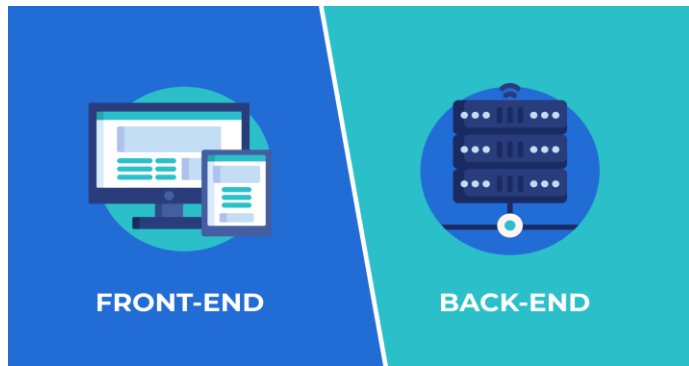


AI en BCA – Productaansprakelijkheid

- Geen aansprakelijkheid als aannemelijk dat gebrek niet bestond op ogenblik waarop product in **verkeer gebracht/later is ontstaan**
 - cf. autonome en zelflerende karakter AI?
 - evolutie naar dynamisch productaansprakelijkheidsrecht
 - ✓ voldoende ingrijpende update/grade: in verkeer brengen nieuw product
 - ✓ volledig uitschakelen voor AI-systemen?
 - ✓ voorstel EC Expertenrapport

AI en BCA – Aansprakelijkheid bewaarder

- **Gelijkaardige discussies** als bij productaansprakelijkheid
- Software als zaak? Gebrekkige AI (cf. vergelijking ‘modelzaak’)?
- Voorstel EP 20 oktober 2020



- Wenselijkheid EU regime?

AI en BCA – Bewijslast

- **Hoge bewijslast**
 - Gebrek, fout, causaliteit,....
 - Bijna onmogelijk (?): expertise, informatieasymmetrie
- **oplossingen:** omkering/verlaging bewijslast, strike aansprakelijkheid, rechtspersoonlijkheid AI,...



[15] If it is proven that an emerging digital technology has caused harm, the burden of proving defect should be reversed if there are disproportionate difficulties or costs pertaining to establishing the relevant level of safety or proving that this level of safety has not been met. This is without prejudice to the reversal of the burden of proof referred to in [22] and [24].

Wat brengt 2022 nog en 2023?

- Voorstel voor een AI-Verordening?
- Initiatieven volgend op publicatie consultatie januari 2022
- Aandacht voor operatoren en productaansprakelijkheid
- Volledig nieuw wetgevend kader BCA <-> 'gerichte' aanpassingen
- Belang standaarden
- Belang rechters
- *Policy prototyping*

Bedankt voor de aandacht!

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