

artificial intelligence laissez faire, regulate or what?

prof.dr. Ronald Leenes

NVaiR talk11 juni 2021

aiR

men zegt



- /Administration
- /Human Resources
- /Legal
- /Accounting
- /Finance
- /Marketing
- /Publicity
- /Promotion
- /Research
- /Business
- /Development
- /Engineering
- /Manufacturing
- /Planning





Q google auto| X

- Q google auto
- Q google **autocomplete**
- Q google **autofill**
- Q google automl
- Q google **autodraw**
- Q google **autocomplete game**
- Q google **automotive services**
- Q google **autofill settings**
- Q google **autonomous car**
- Q google **automation**

Google Search I'm Feeling Lucky

Report inappropriate predictions



women shouldn't

I'm Feeling Lucky »

women should

About 128,000,000 results (0.33 seconds)

Should women have rights? | Debate.org

www.debate.org/opinions/should-women-have-rights ▼

I'm not saying **women shouldn't** have any rights, I just don't think they should have equal rights. Because (no offense) they're not equal. Men are more intelligent ...

Likes: Most to Least - Replies - Replies: Most to Least - Created: Old to New

Why Women Shouldn't Code — Medium

<https://medium.com/.../why-women-shouldnt-code-82205165e64a> ▼

Women shouldn't code. Or at least we should not be teaching every little girl to code in the hope of attracting more women to the technology business that way.

Why Women Shouldn't Work - Roosh V

www.rooshv.com/why-women-shouldnt-work ▼

Oct 21, 2015 - How essential are **women** in the labor force? How critical are the job functions they perform when compared to men? I wondered about these ...

Women at Planned Parenthood 'Shouldn't Have ... - Mediaite

www.mediaite.com/.../wasserman-schultz-women-at-planned-pa... ▼ Mediaite ▼

17 hours ago - **Women shouldn't** have to fear for their lives to access basic health services or exercise their constitutionally-protected right to choose."

Five Types of Women You Shouldn't Marry - Kevin A ...

www.kevinathompson.com/five-types-of-women-you-shouldnt-marry/ ▼

A reader asked, "What type of **woman** should I not marry?" Whenever I'm giving young men marriage advice, I always say, "Find a **woman** who is low ...



NEW SUV PEUGEOT 3008

NEVER HAS AN SUV GONE SO FAR



peugeot.com

PEUGEOT RECOMMENDS **TOTAL** Combined consumption (l/100 km): from 3.6 to 5.8. CO₂ emissions (g/km): from 93 to 134.

MOTION & EMOTION



<https://www.analyticsinsight.net/wp-content/uploads/2019/04/Computer-Vision12.png>

<https://towardsdatascience.com/how-do-self-driving-cars-see-13054aee2503>







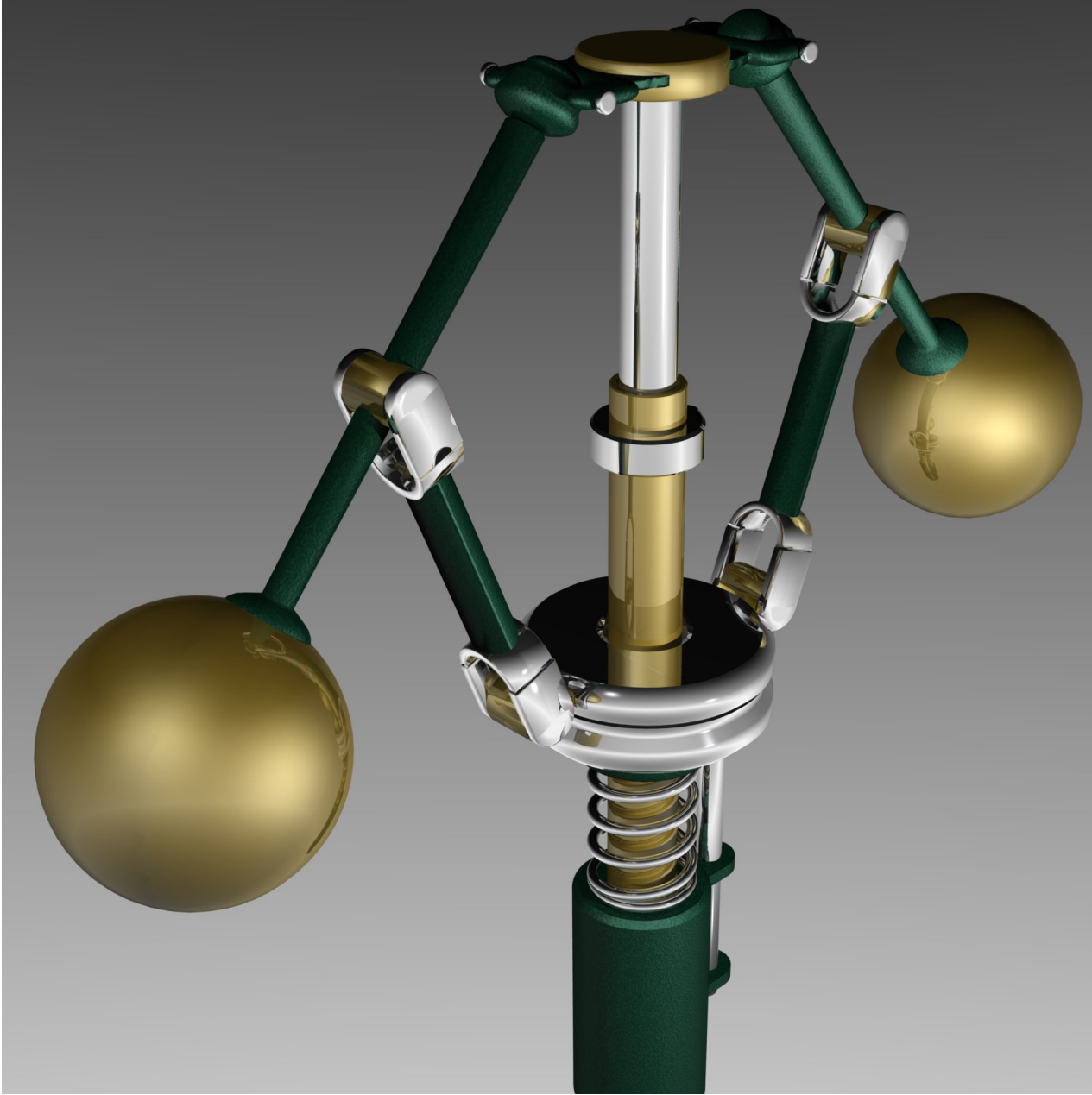


willen we dit soort

gevolgen



lijkt me niet



As advertised...



...in reality



**the trouble with
disruptionTM**



ethics



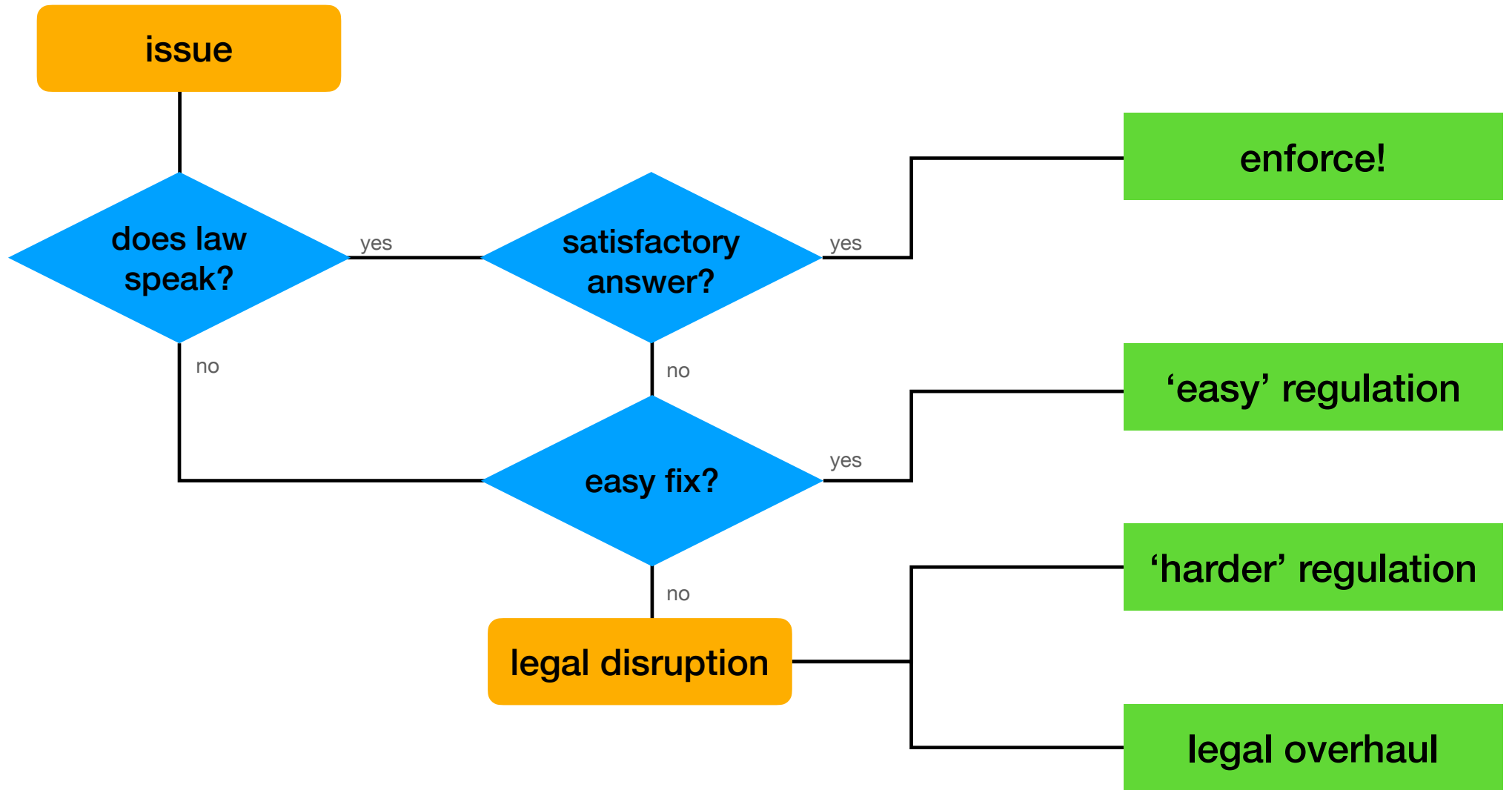


law

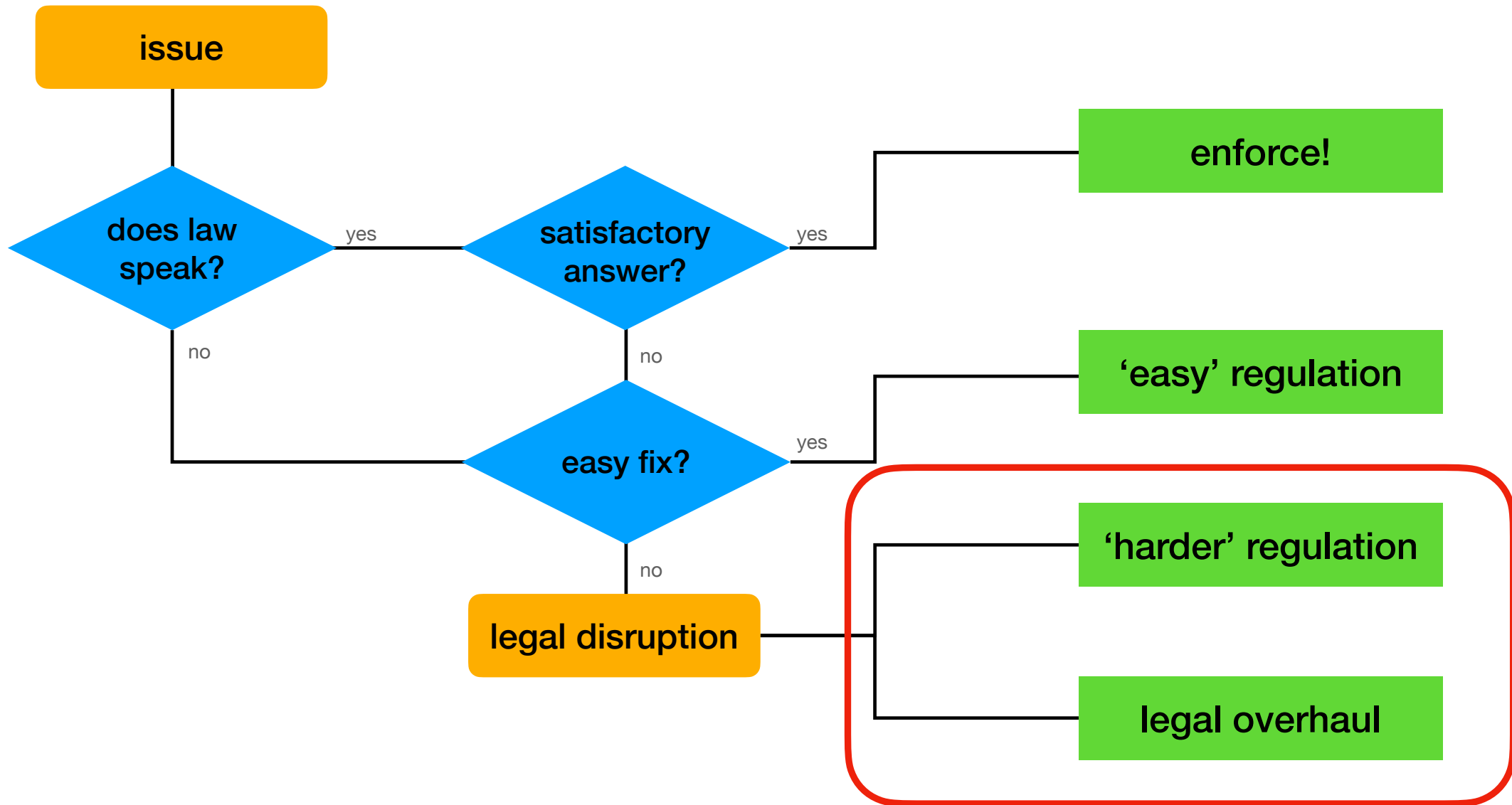




legal disruptionTM



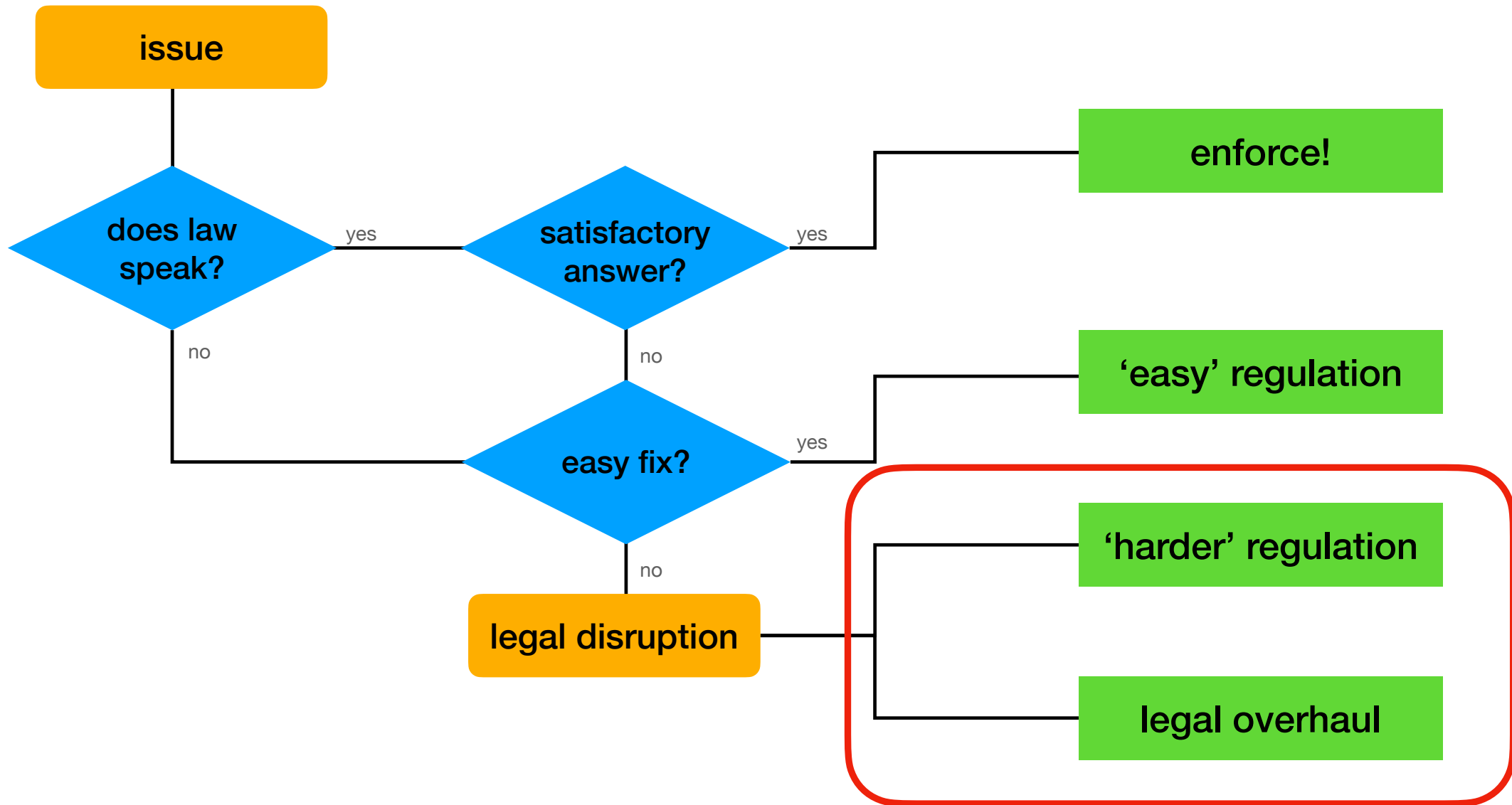




agent

ai

object





proposal for an EU **AI Regulation***

* 21 April 21, COM(2021) 206 final



goal

establish

human centric

ai

(in EU and beyond*)

dignity
fundamental rights (in EU Charter)
secure, trustworthy, robust

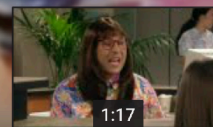
* extra-territorial effect

draft EU AI Regulation COM(2021) 206 final sheet 1

goal

22 April 2012 prof.dr. Ronald Leenes Tilburg University – TILT @tiltr

Computer says No!



what does it do?

software using
ai-techniques{connectionist, symbolic, statistical}
taking human-defined objectives to
generate output{content, predictions, decisions, ...}
that affects their environments

risk-based

placing on the market,
putting into service and using

regulation of high-risk ai systems*

ban on certain types of ai-systems
requirements & obligations
transparency rules
market monitoring

health or safety risk or
risk of adverse impact on fundamental rights
in certain uses in areas{remote biometric ID/categorisation,
safety component in critical infra, education/vocation,
employment, access/enjoyment of public services,
law enforcement, migration/asylum/border control,
adjudication in court}**

* not having a strictly military purpose

** lots of caveats, see sheet annex 2

draft EU AI Regulation COM(2021) 206 final sheet 2

what?

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systems

prohibited systems art 5

- a. subliminal manipulation
- b. exploiting vulnerabilities
- c. social scoring

d. LEA real-time
biometric ID
exceptions....

high-risk systems art 6

annex II

- a. civil aviation
- b. two- or three-wheel vehicles and quads
- c. agricultural and forestry vehicles
- d. marine equipment
- e. rail systems
- f. motor vehicles and trailers
- g. unmanned aircraft

annex III

- a. biometric ID
- b. management and operation of critical infra
- c. edu and vocational training assessment
- d. employment/worker assessment and access to self-employment
- e. access/enjoyment of essential public/private services
- f. law enforcement risk assessment/pre-crime/deep fakes/profiling
- g. migration/asylum/border control
- h. administration of justice (robo-judge)

other systems implicit

prohibited ai systems

art. 5

manipulation

deploying subliminal techniques to distort behaviour to cause physical or psychological harm – art 5.1 (a)

exploitation

exploitation of vulnerabilities of a specific group or persons due to age, physical or mental disability to distort behaviour to cause physical or psychological harm – art 5.1 (b)

social scoring

classification of trustworthiness of persons over time based on social behaviour, personal or personality characteristics leading to negative treatment unrelated or disproportionate to context of data or behaviour – art 5.1 (c)

real-time remote biometric ID

real-time remote biometric identification in public spaces for the purpose of law enforcement, art 5.1 (d) unless ...

- (a) targeted search for specific potential victims of crime (incl missing children)
- (b) prevention of specific, substantial and imminent threat to life or physical safety of natural persons or of terrorist attack
- (c) detection, localisation, identification, prosecution of suspect/perpetrator of serious crime

subsidiarity/proportionality art. 5.2

prior authorisation art. 5.3

prior MS procedure art. 5.4

pre-designated high-risk systems

aka Annex III

any system on this page is considered a high-risk system and will have to comply with chapter 2 requirements and chapter 3 obligations

COM: power for delegated acts to update annex III – art 7

intended purpose, likelihood of use, harm track record, # affected, vulnerability, dependance, reversibility, redress, preventive measures art 7.2

biometric identification

real-time or post remote biometric ID of natural persons Annex III 1 (a)

critical infrastructure

safety component in management and operation of road traffic, water, gas, heating, electricity Annex III 2 (a)

education

assessing, determining access, admission or assigning of persons/students Annex III 3 (a,b)

essential private & public services

- (a) determining eligibility/granting/reduction/revocation/reclaim for/of public assistance/benefits/services Annex III 5 (a)
- (b) evaluating creditworthiness/credit score (unless small scale providers for own use) Annex III 5 (b)
- (c) emergency dispatch Annex III 5 (c)

migration/asylum/border control

- (a) polygraphs/emotional state detection of individual Annex III 7 (a)
- (b) security/irregular immigration/health risk assessment Annex III 7 (b)
- (c) verification by checking security features of travel/supporting document of natural persons Annex III 6 (c)
- (d) examination of eligibility of asylum/visa/residence permit applications and complaints Annex III 6 (d)
- (e) natural persons in multi datasets Annex III 6

employment

- (a) recruitment/selection/screening/filtering/evaluating candidates Annex III 4 (a)
- (b) decision making on promotion/contract termination/task allocation/monitoring and evaluation of performance/behaviour of employees Annex III 4 (b)

law enforcement

- (a) individual risk assessment for (re)offending or potential of becoming victim Annex III 6 (a)
- (b) polygraphs/emotional state detection of individual Annex III 6 (b)
- (c) detection of deep-fakes Annex III 6 (c)
- (d) evaluation of reliability of evidence in criminal investigation/prosecution Annex III 6 (d)
- (e) profiling of natural persons to predict (re)occurrence of criminal offences (art 3(4) Dir 2016/680) Annex III 6 (e)
- (f) profiling of natural persons to detect/investigate/prosecute(art 3(4) Dir 2016/680) Annex III 6 (f)
- (g) crime analytics and data fishing expeditions regarding natural persons in multi datasets Annex III 6 (g)

courts

judicial support in researching/interpreting/applying law/facts Annex III 8 (a)

how does it work?

high-risk ai systems

must meet

chapter 2 requirements & chapter 3 obligations

human oversight – art 14
accuracy, robustness, cybersecurity art – 15

risk, data & quality management

technical documentation – art 11
record keeping system (logs) – art 12

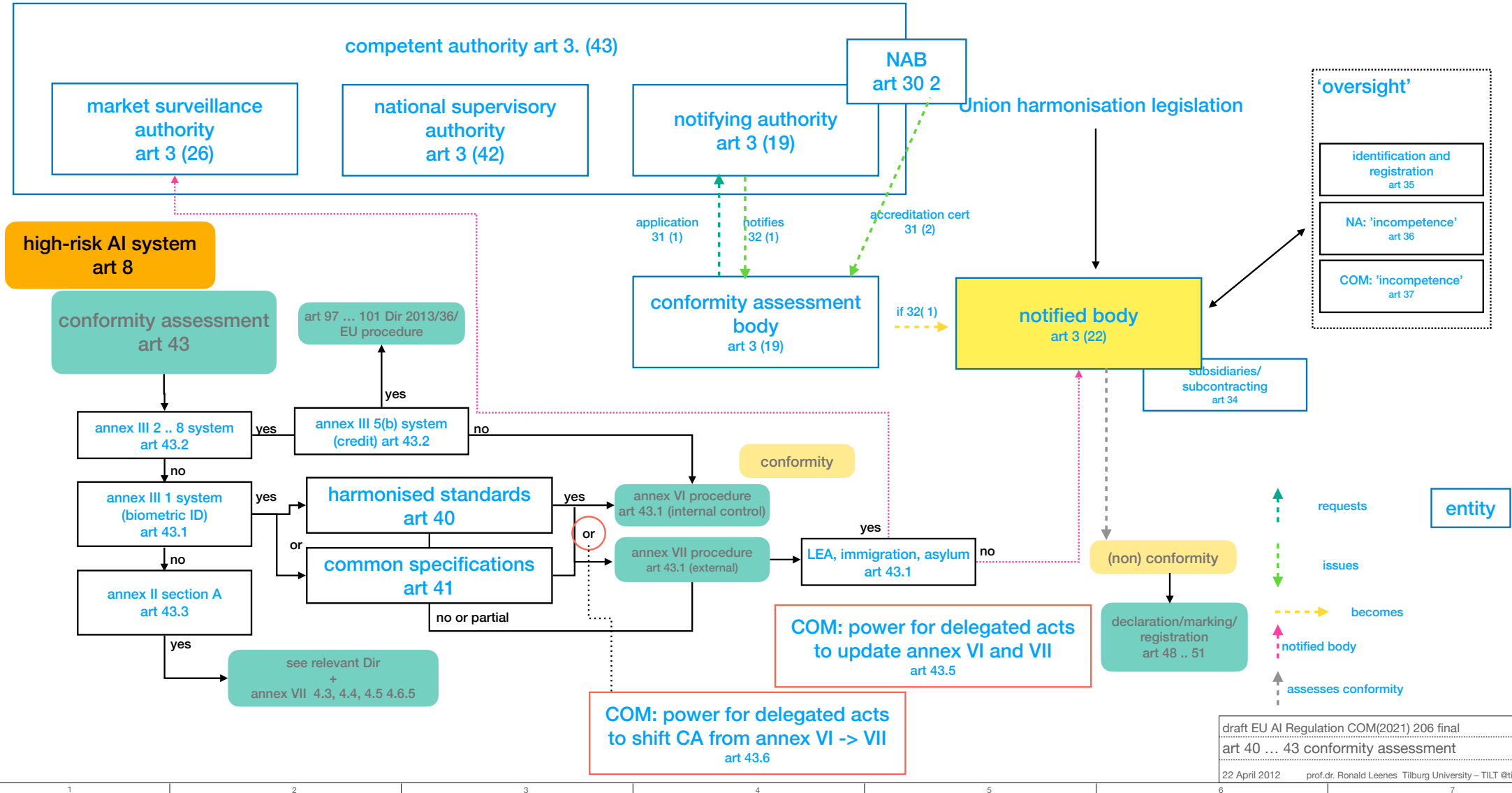
transparency to users – art 13
accountability and transparency
transparency to humans interacting – art 52

conformity assessment – art 19, 40-50

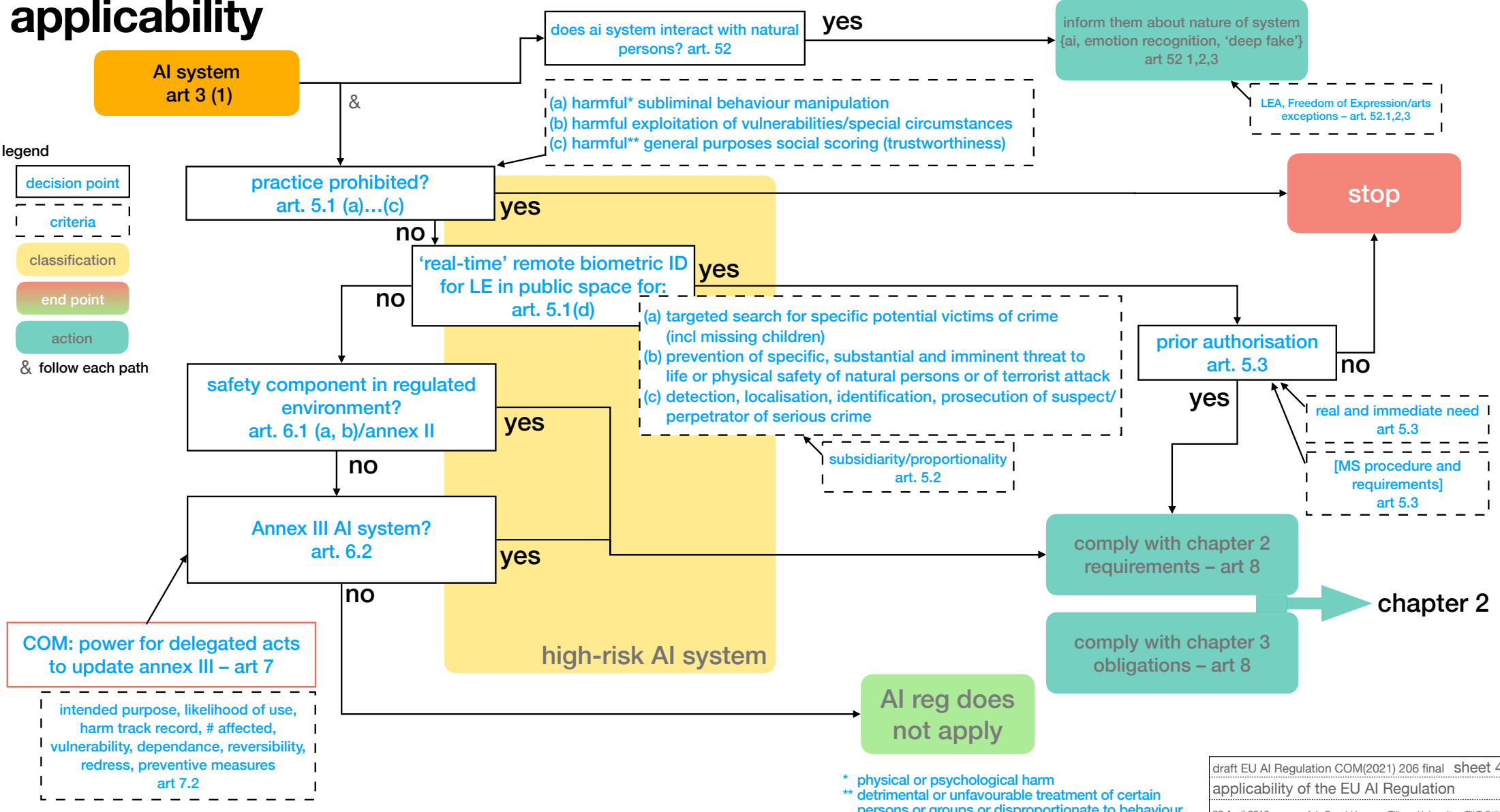
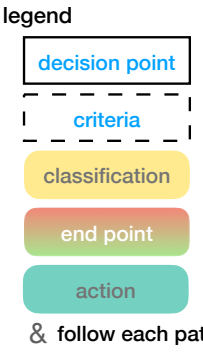
registration – art 51

CE marking

conformity assessment



applicability



* physical or psychological harm
 ** detrimental or unfavourable treatment of certain persons or groups or disproportionate to behaviour

observaties

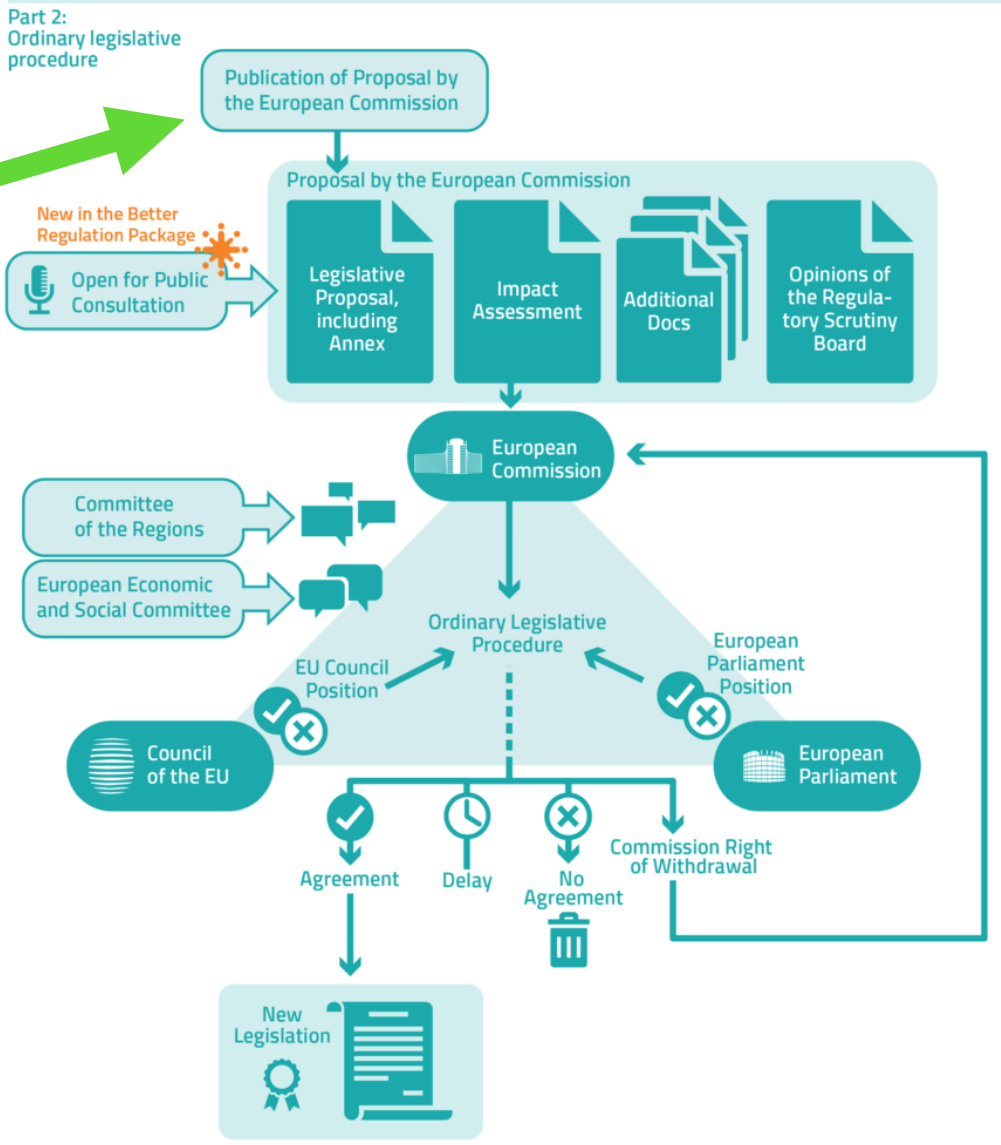
- goede operationalisatie van HLEG voorwerk
- speelkwartier is over. Als je high-risk systeem wilt, dan zekerheid
- nieuw, maar bekend
- veel raakvlakken: safety reg, GDPR, ...
- nadruk op accountability en transparantie
- ingewikkeld (zie schema's), (veel) open texture (art 5)
- (te) veel LEA openingen (remote biometric ID, sandboxes)

meer observaties

- scope is niet heel duidelijk. Hoeveel valt er wel/niet onder?
- nadruk op publieke sector (Annex III)?
- niet alle verboden toepassingen zijn verboden (biometric ID)
- eisen aan data en betrouwbaarheid zijn erg hoog
- ingewikkeld, open, certificeringssysteem
- regulatory sandbox?
- waarom is deep-fake detection high-risk?

and now what?

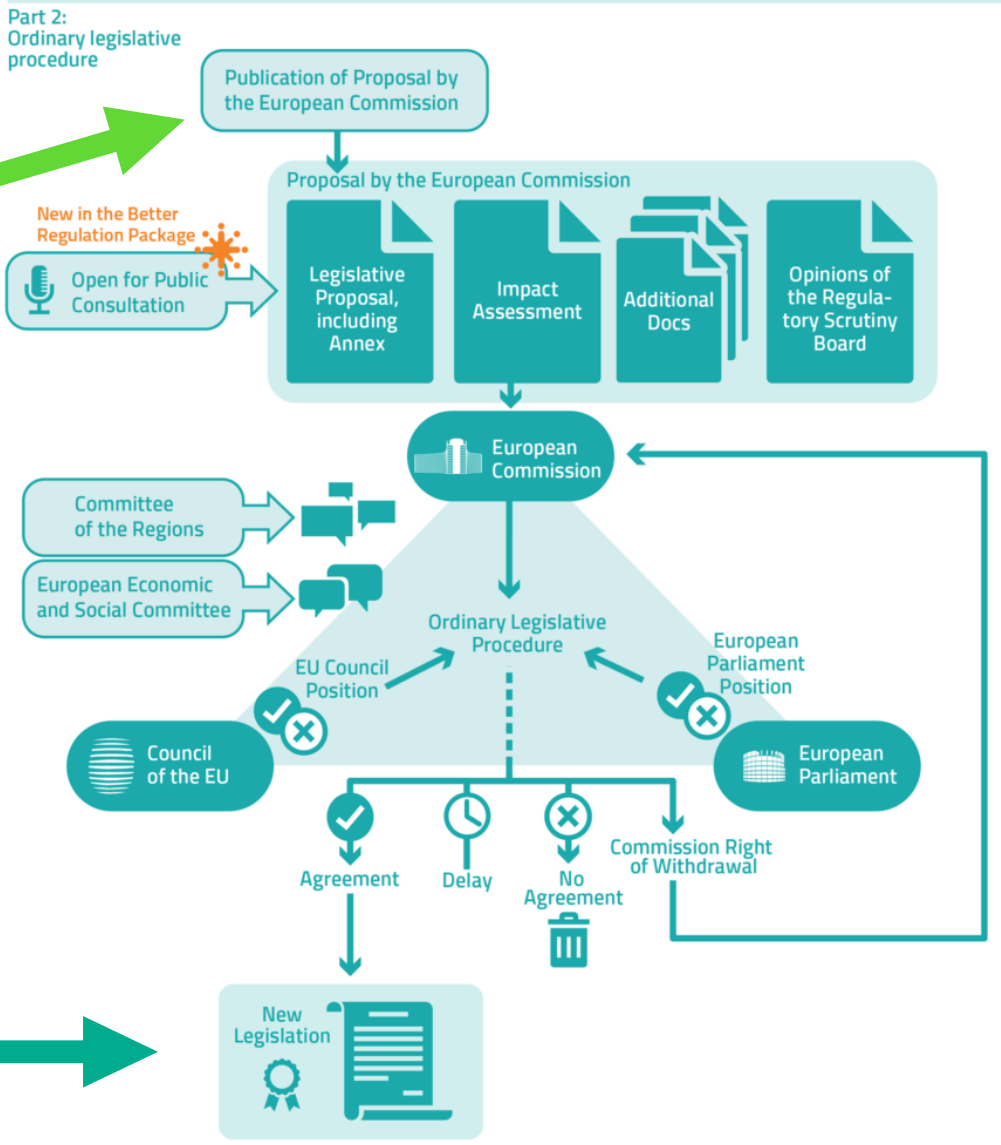
21 April 2021





and now what?

21 April 2021



2025/26





Jonesy and Mopo, the reconciliation

thank you

@TILTr