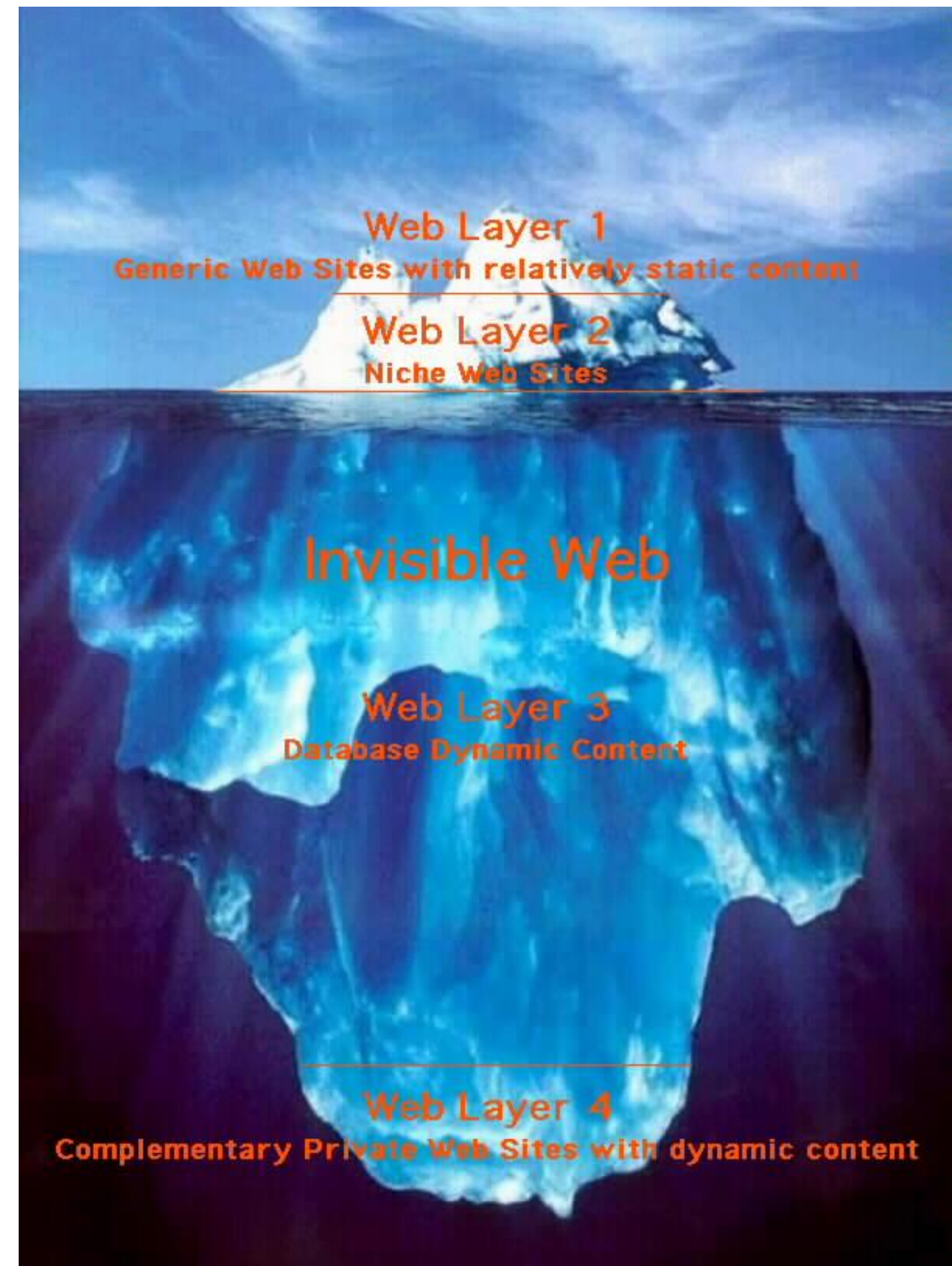
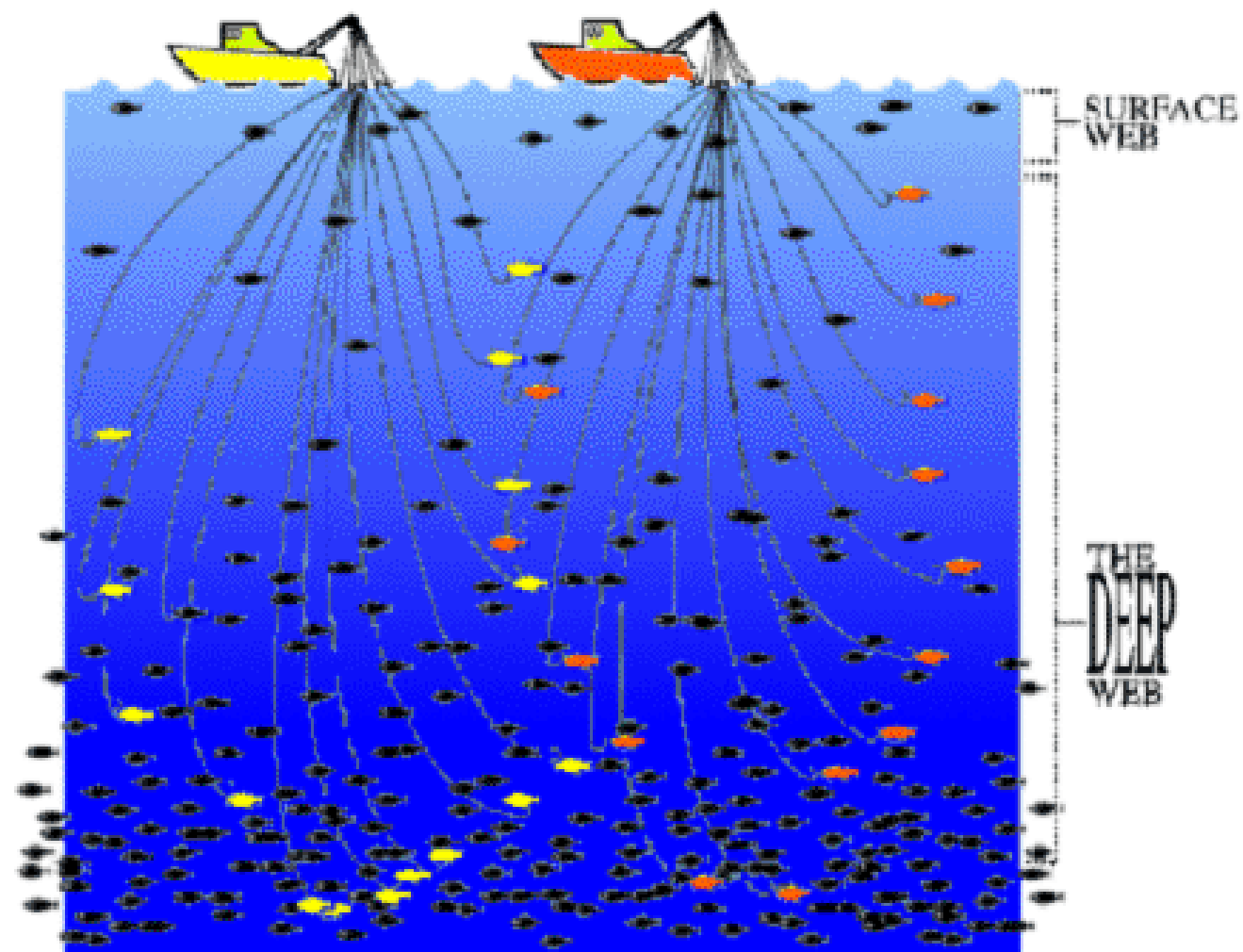




**GHENT
UNIVERSITY**

INLEIDENDE BESCHOUWINGEN

Tussen bubbel en silo: sporen naar adequate informatie. / Inge Van Nieuwerburgh / 24 nov. 2022



DILEMMA

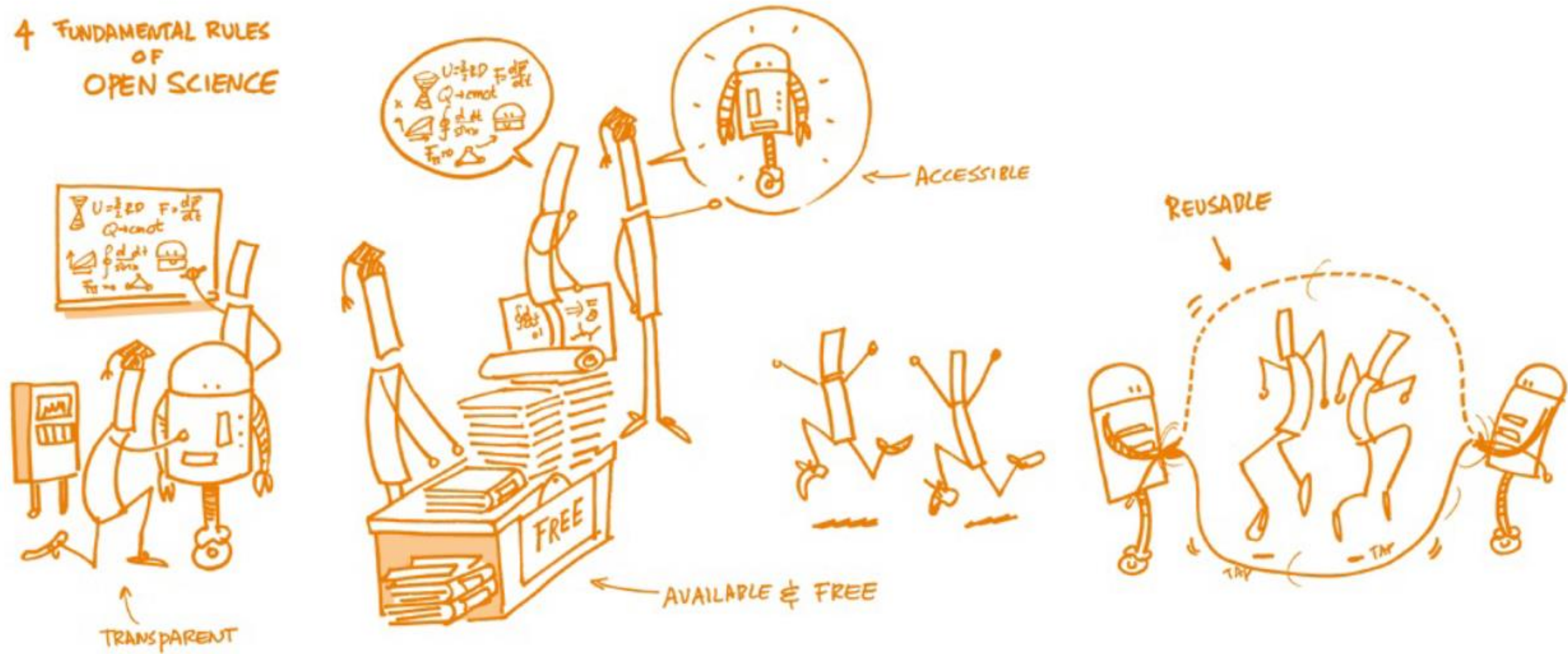
Information overload

-

Open science

OPEN SCIENCE

OPEN SCIENCE





Components of Open Science



“I do not belong to the academic world, but I would like to do research all the same.”



Julian, passionate about sciences and new technologies

#DIYBio

#hackerspace

#Openlab

Sounds familiar?



Source: Hack your PHD

<http://hackyourphd.org/en/flyers/>

CONTEXT

UNESCO RECOMMENDATION OPEN SCIENCE

— Press release:

“The COVID-19 pandemic has brought into focus how open science practices such as open access to scientific publications, the sharing of scientific data and collaboration beyond the scientific community can speed up research and strengthen the links between science policy and society. The UNESCO Recommendation on Open Science will drive the wider adoption of open practices, encourage greater endorsement of open science and ensure that research findings are beneficial to all.”

Audrey Azoulay, UNESCO Director-General

Open Science for the People, Planet & Prosperity



Open Science has the potential of increasing the quality of science and making the entire scientific process more transparent, collaborative and inclusive.



unesco



Open Science is increasingly recognized as a critical accelerator for the implementation of the Sustainable Development Goals.



By making science more connected to societal needs and by promoting equal opportunities for all (scientists, policy-makers and citizens), Open Science can be a true game-changer in bridging the science, technology and innovation gaps between and within countries and fulfilling the human right to science.

EOSC: WEB OF FAIR DATA AND SERVICES

The Vision

Enabling the EOSC vision with a multi-stakeholder European partnership

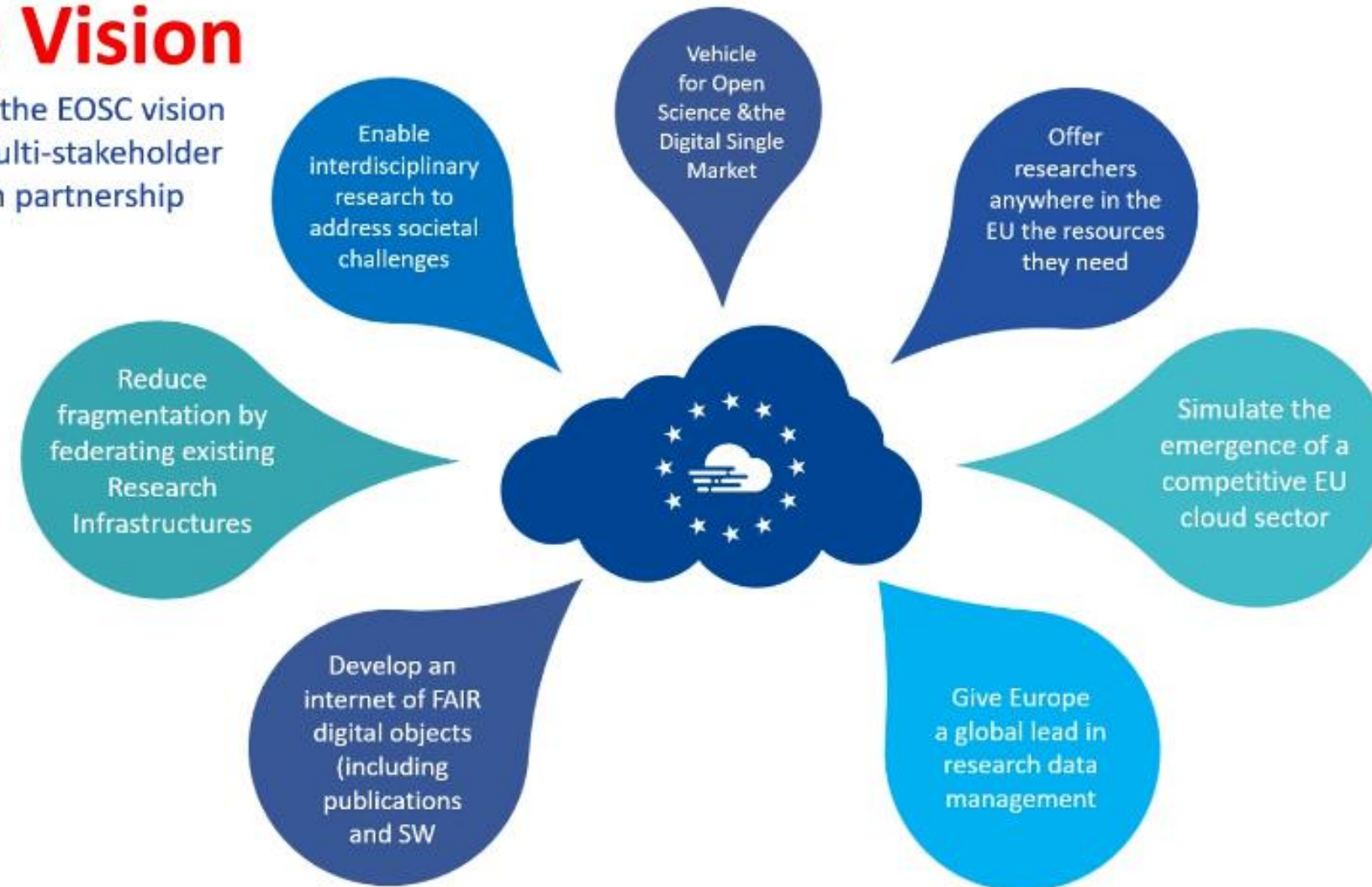
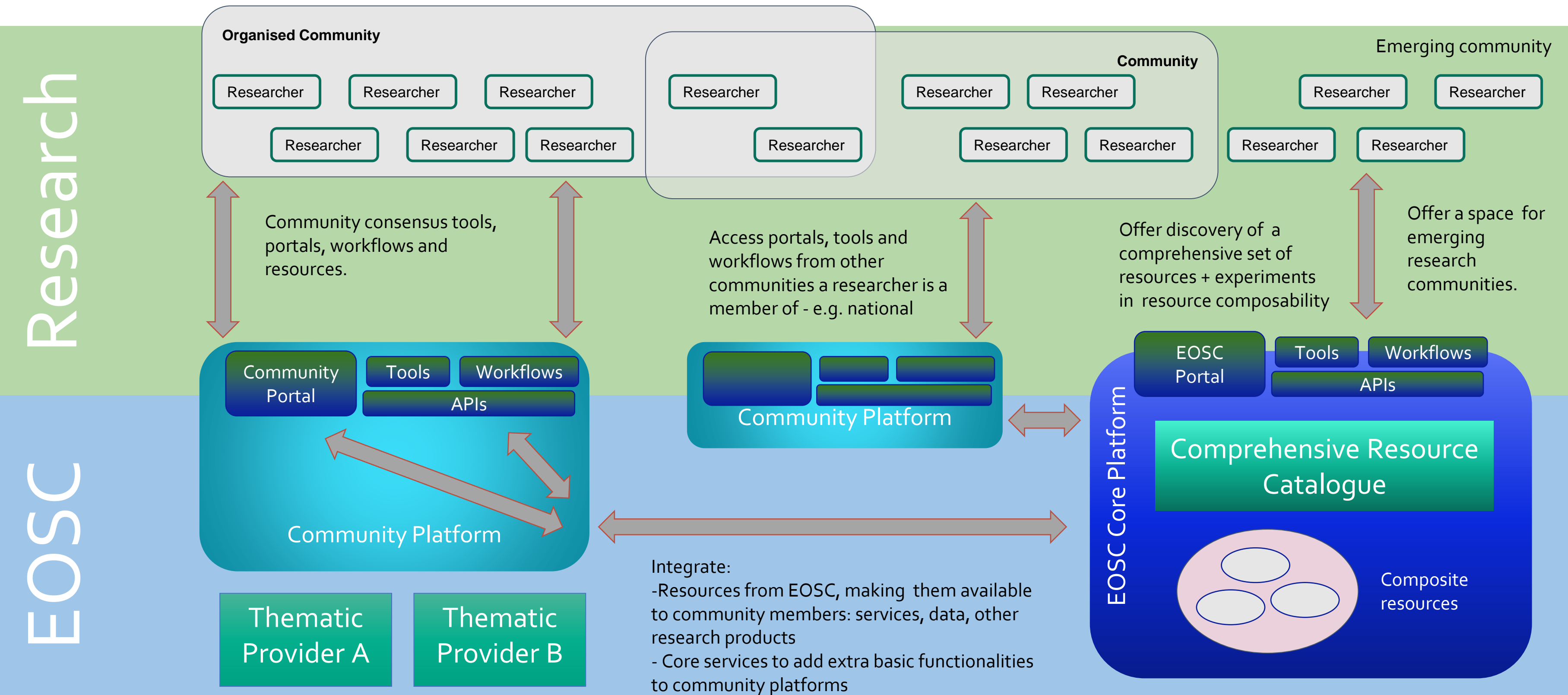


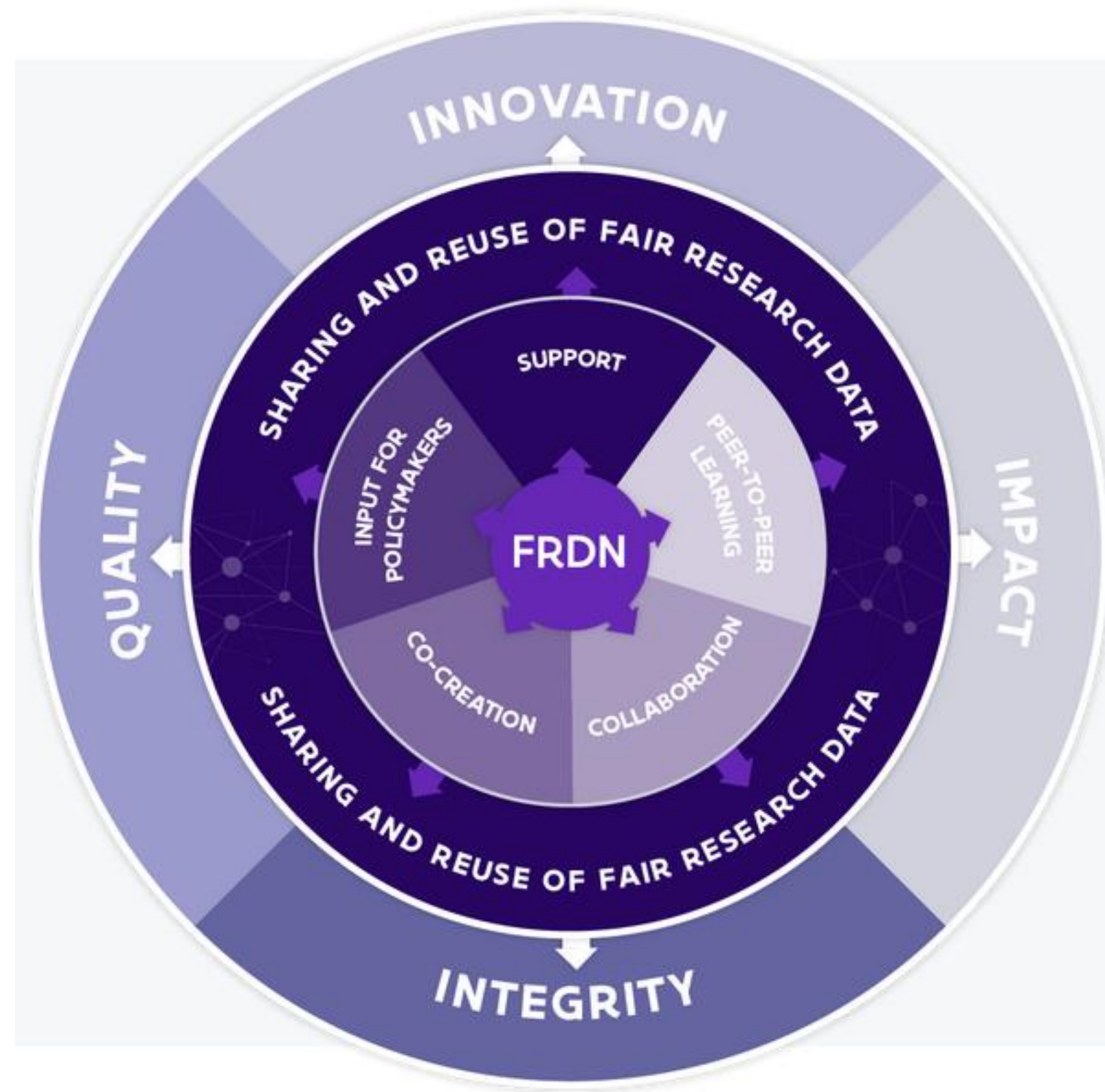
Figure 1: EOSC vision (II)

Source: https://ec.europa.eu/info/sites/default/files/research_and_innovation/funding/documents/ec_rtd_he-partnership-open-science-cloud-eosc.pdf

EUROPEAN OPEN SCIENCE CLOUD



FOSB - FRDN



COALITION S

— Funders unite to forward open access

Ten principles



01 *copyright*

Authors or their institutions retain copyright to their publications. All publications must be published under an open license, preferably the Creative Commons Attribution license (CC BY), in order to fulfil the requirements defined by the Berlin Declaration.

service criteria

The Funders will develop robust criteria and requirements for the services that high-quality Open Access journals, Open Access platforms, and Open Access repositories must provide.

02

03 *incentives*

In cases where high-quality Open Access journals or platforms do not yet exist, the Funders will, in a coordinated way, provide incentives to establish and support them when appropriate; support will also be provided for Open Access infrastructures where necessary.

publication fees

Where applicable, Open Access publication fees are covered by the Funders or research institutions, not by individual researchers; it is acknowledged that all researchers should be able to publish their work Open Access.

04

05 *business models*

The Funders support the diversity of business models for Open Access journals and platforms. When OA publication fees are applied, they must be commensurate with the publication services delivered. The structure of such fees must be transparent to inform the market and funders potential standardisation and capping of payments of fees.



06 *transparency*

The Funders encourage governments, universities, research organisations, libraries, academies, and learned societies to align their strategies, policies, and practices, notably to ensure transparency.

application

The above principles shall apply to all types of scholarly publications, but it is understood that the timeline to achieve Open Access for monographs and book chapters will be longer and requires a separate and due process;

07

08 *transformative arrangements*

The Funders do not support the 'hybrid' model of publishing. However, as a transitional pathway towards full Open Access within a clearly defined timeframe, and only as part of transformative arrangements, Funders may contribute to financially supporting such arrangements;

monitoring

The Funders will monitor compliance and sanction non-compliant beneficiaries / grantees;

09

10 *research assessment*

The Funders commit that when assessing research outputs during funding decisions they will value the intrinsic merit of the work and not consider the publication channel, its impact factor (or other journal metrics), or the publisher.

ENKELE TRENDS

1. PREPRINTS

“The COVID-19 pandemic has seen a surge in the numbers of preprints submitted by researchers [97]. While 807 preprints were deposited on medRxiv in the six-month period between 1st July 2019 and 31st December 2019, 6,771 preprints were submitted in the next six months (between 1st January 2020 and 30st June 2020), an increase of 739%. These figures are, respectively, 15,838 and 21,804 for bioRxiv (38% increase) and 87,942 and 112,197 for arXiv (28% increase). A recent study [98] gives more insights on the scale of this disruption. The use of preprints during outbreaks is certainly not new: a systematic review identified the publication of 174 and 75 preprints during the Ebola and Zika virus outbreaks, respectively [99]. Nevertheless, these figures are much smaller than the number of preprints submitted in the first 6 months of the COVID-19 pandemic.”

Besançon, L., Peiffer-Smadja, N., Segalas, C. *et al.* Open science saves lives: lessons from the COVID-19 pandemic. *BMC Med Res Methodol* **21**, 117 (2021). <https://doi.org/10.1186/s12874-021-01304-y>

1. PREPRINTS

U brak nog met een tweede taboe: u trekt zo snel mogelijk naar de media en wacht niet af tot een analyse in een vaktijdschrift is gepubliceerd.

‘We analyseren een extreem weerfenomeen in realtime en wachten niet op de peerreview, de gebruikelijke en belangrijke kwaliteitscontrole door collega-wetenschappers. Je kan dat arrogant noemen. En als ik het niet zelf zou doen, zou ik ook heel sceptisch zijn over die werkwijze.’

Waarom moeten wij dan vertrouwen hebben in uw analyses?

‘De methodiek achter onze analyses is niet nieuw en is onderworpen aan alle nodige kwaliteitstoetsen. Onze snelheid compenseren we bovendien door telkens heel transparant te zijn. We nodigen iedereen uit om met onze data alles na te rekenen.’

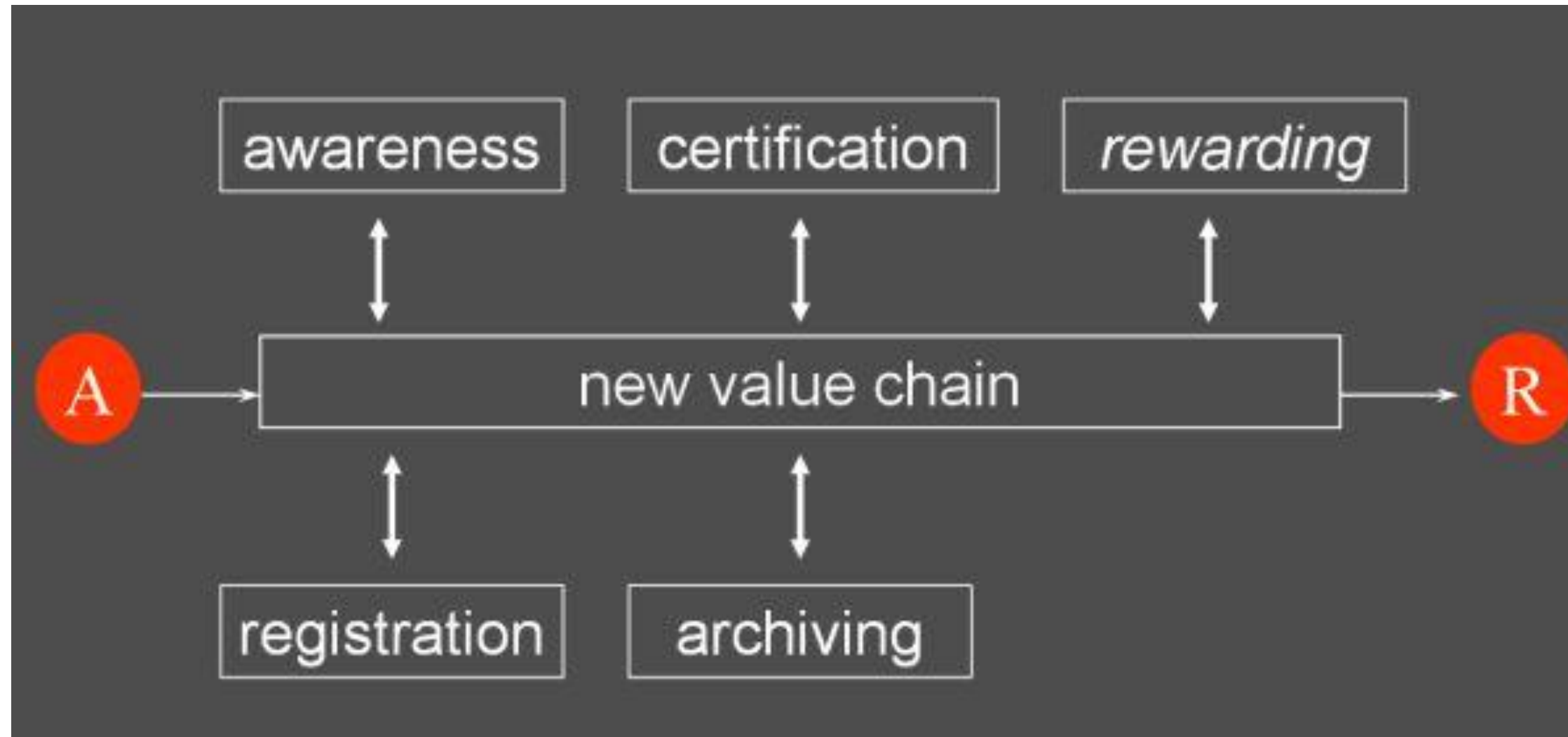
‘We publiceren onze resultaten ook nog altijd in vaktijdschriften en daarvoor moeten ze de peerreview doorstaan. Tot dusver hebben we nog geen enkele keer de resultaten en conclusies moeten bijstellen die we hadden gepresenteerd. Juist omdat veel klimaatwetenschappers sceptisch waren over ons werk – en nog altijd zijn – liggen onze studies steeds onder het vergrootglas. Er zijn volgens mij geen andere studies in de klimaatwetenschap die even streng worden beoordeeld.’

Interview Friederike Otto door Maxie Eckert,
De Standaard zat. 16 okt. 2021,
https://www.standaard.be/cnt/dmf20211015_97573912

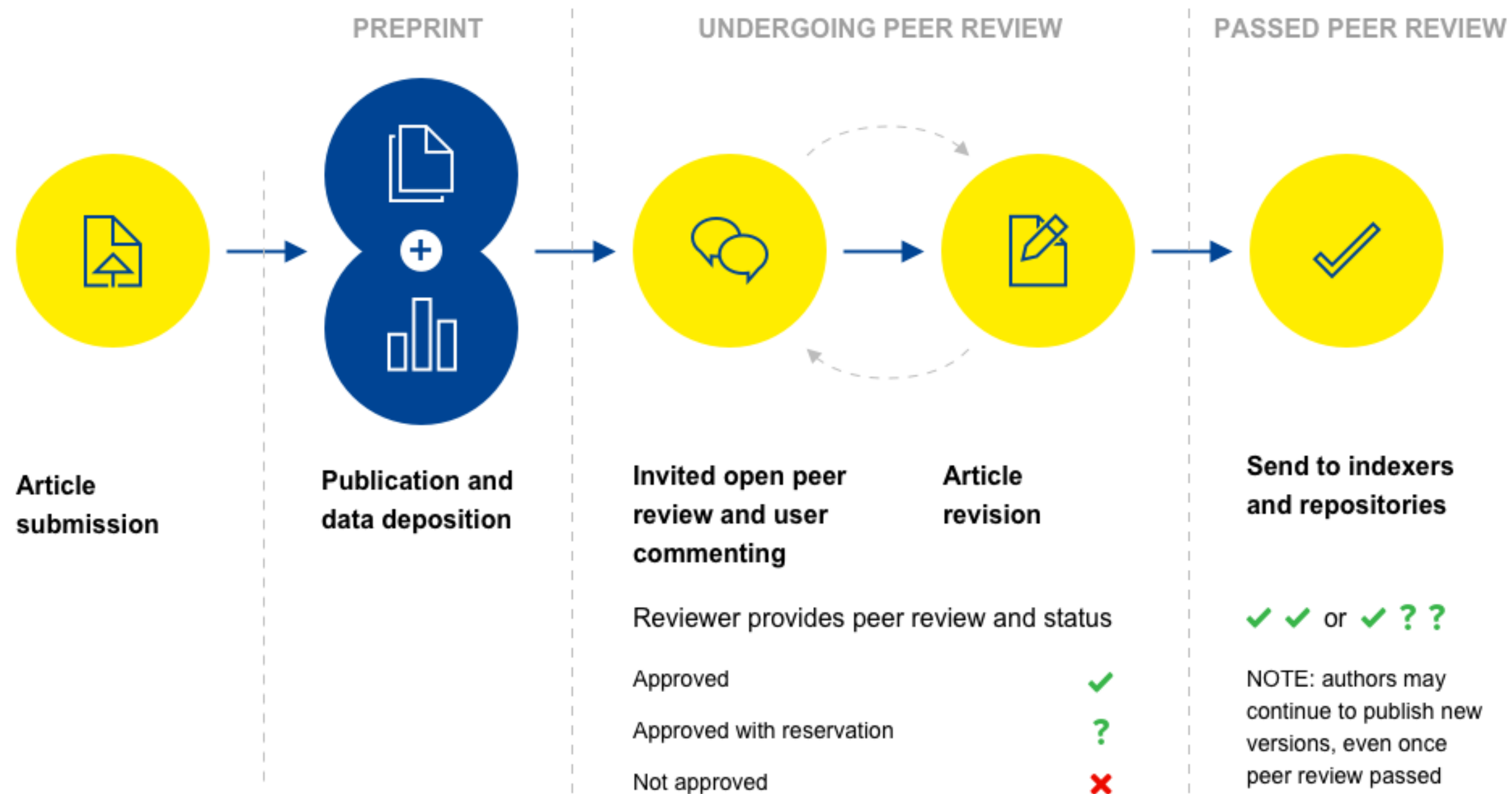
2. OPEN PEER REVIEW



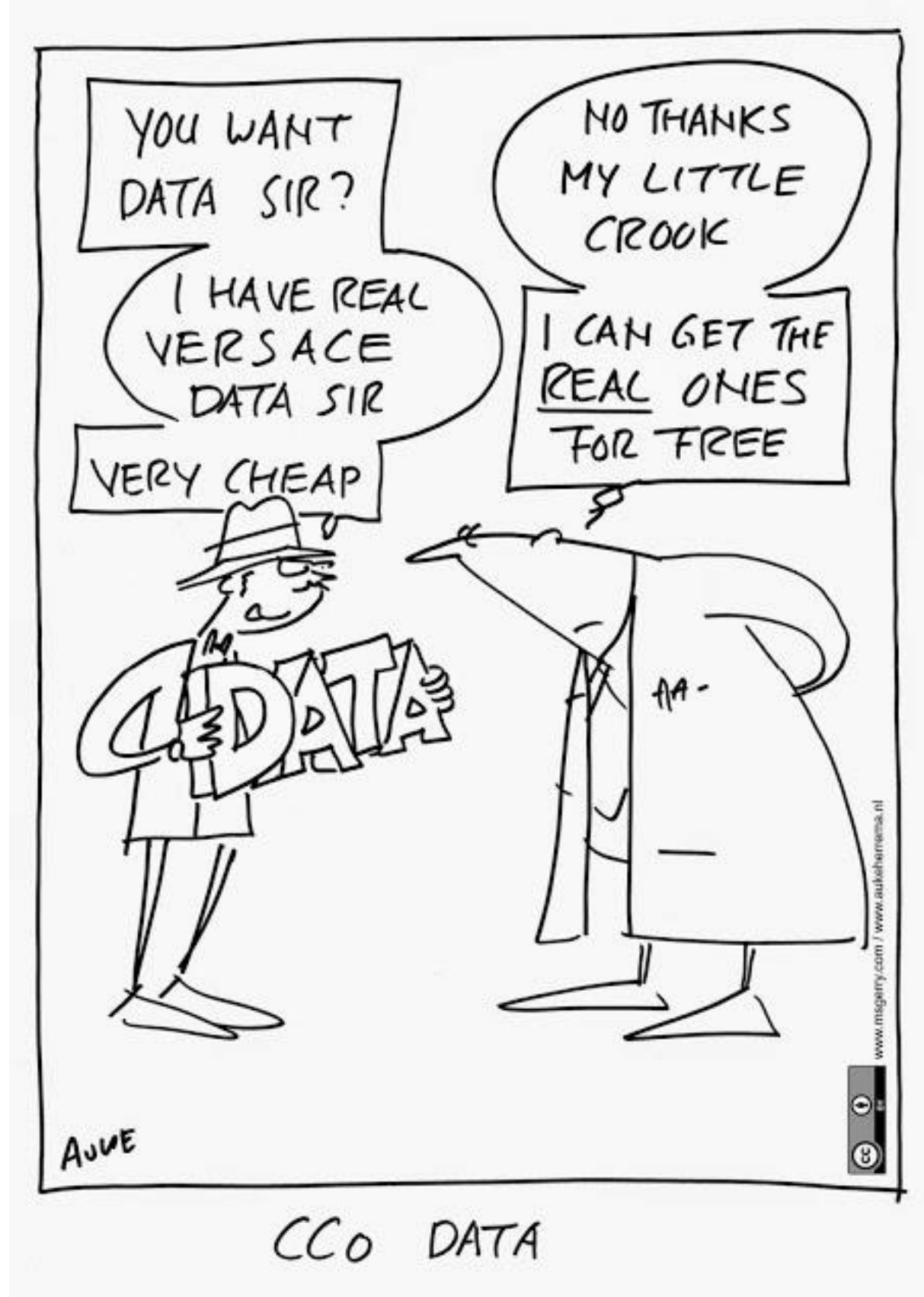
3. OPEN PEER REVIEW



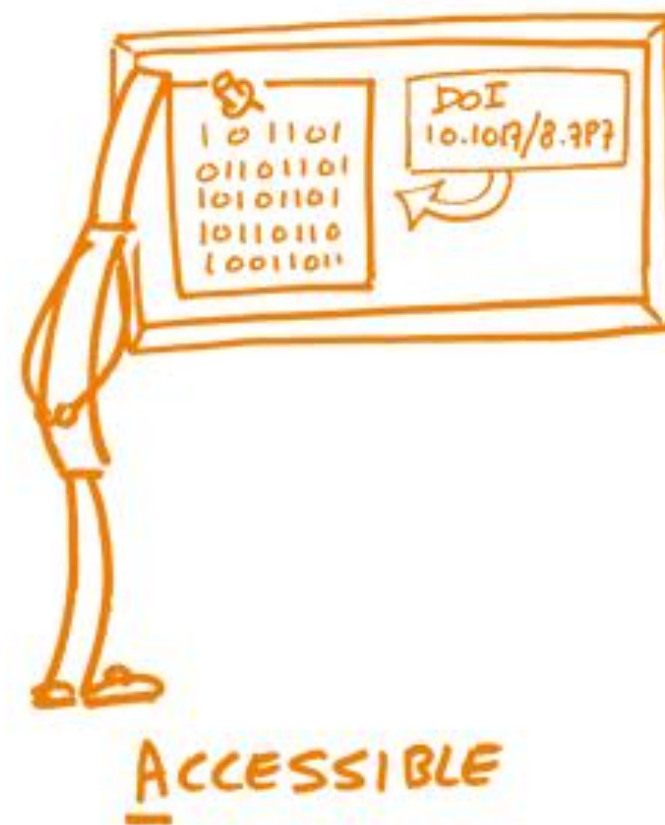
3. DIAMOND OPEN ACCESS



4. FAIR & OPEN DATA



FAIR DATA PRINCIPLES



<https://book.fosteropenscience.eu/>

WAAR VIND JE OPEN INFORMATIE?

- OpenAIRE <https://explore.openaire.eu/>
- Tijdschriften: <http://doaj.org>
- Boeken: <http://www.oapen.org/home>
- Google scholar <http://scholar.google.com>

Inge Van Nieuwerburgh

Open Science team

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