Open Access Publishing
Author's and Editor's Experiences

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ULiège Open Science Day

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Open Access Publishing
Author's and Editor's Experiences

- **Topical Editor: 2014–2021**
  - Geoscientific Model Developments (GMD)
  - Open Access Publication of EGU/Copernicus Publications
  - Code (and data) policy: *in principle* vs. *in practice*
- **Author (and Reviewer)**
  - Open Access Paper + FOSS: extra work
  - FOSS: code absorption pitfall

Geoscientific Model Development
A journal of the European Geosciences Union

- **EGU**
  - non-profit international union of scientists with about 19,500 members
  - focusing on geosciences, planetary, space sciences and related fields
- **Endorses 19 peer-reviewed journals**
  - all open access
  - operational publisher: Copernicus Publications

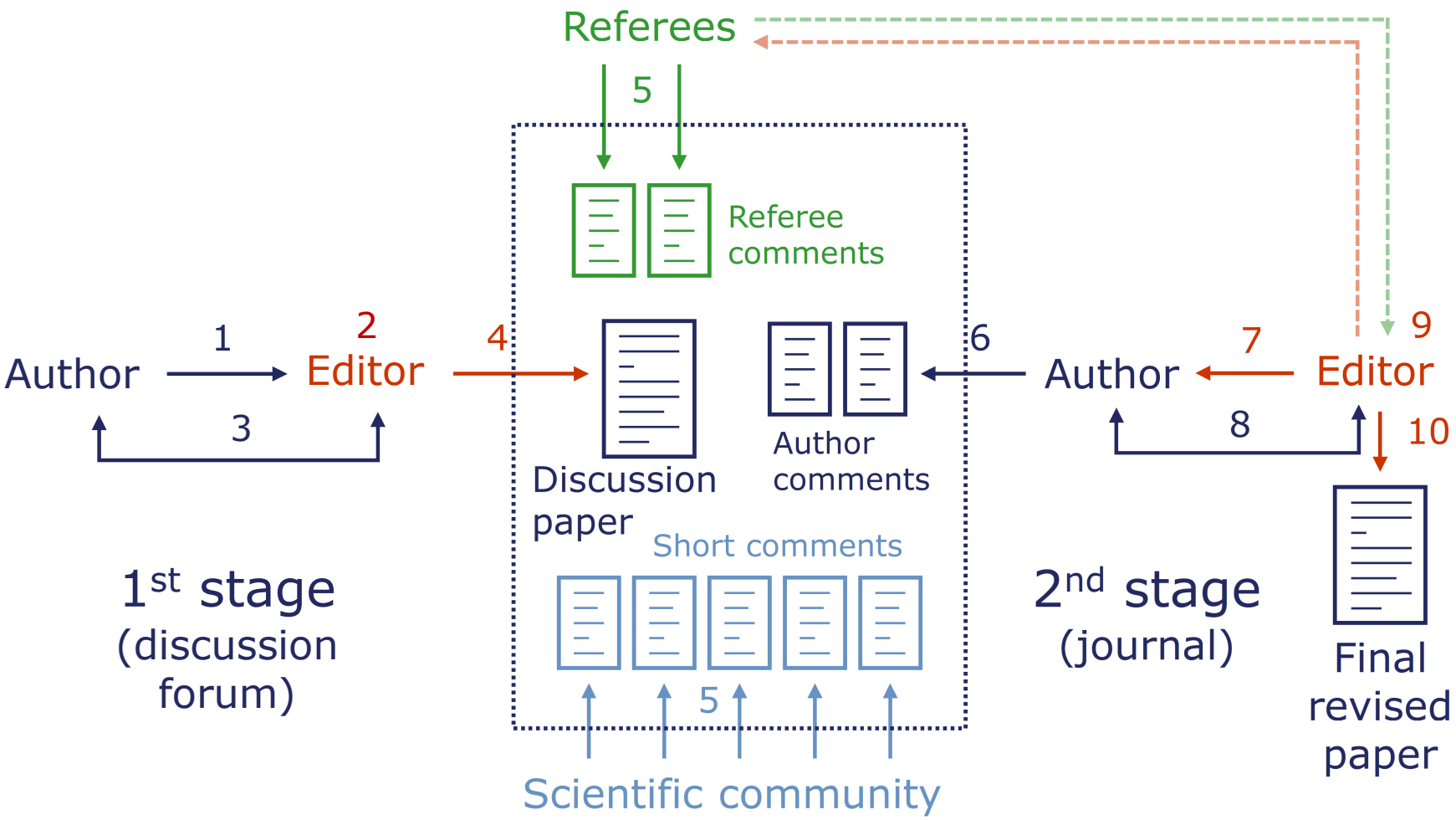
Copernicus Publications

- **Limited-liability corporation (*GmbH*, *SRL*)**
- **Single shareholder:**
  non-profit society *Copernicus Gesellschaft e.V.*
- **Portfolio of 27 active open-access journals**
- **Threefold open-access publishing strategy**
  - open access to the reviews
  - open access to the papers
  - open access to the assets (data sets, code, …)

Interactive Public Peer Review™

- Reviewers post their reports and comments publicly (nominal or anonymous)
- Members of the scientific community may also post comments (nominal)
- Authors also have to post their replies as public comments
- Each comment gets a DOI and is thus citable

Interactive Public Peer Review™



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GMD Code and Data Availability Policy

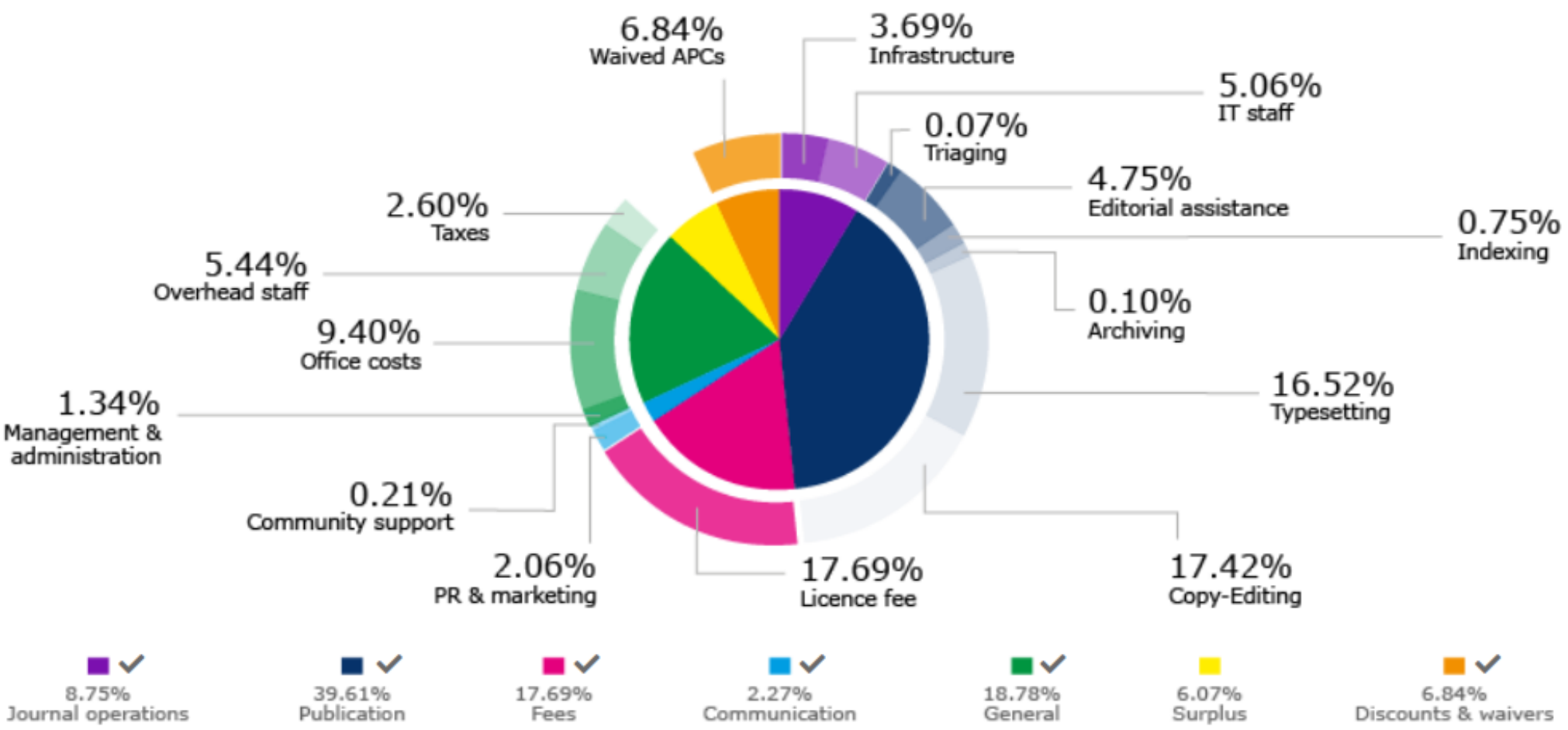
- **In principle**: code and data used in a manuscript must have been archived in persistent public archives (e.g., Zenodo) by the time of submission
- *Open Source Definition* compliant code licence required
- If public archiving not possible for reasons beyond authors' control (e. g., legal, third-party copyright, …):

  → confidential access to the code and data for the editor and reviewers must still be provided

Author and Reviewer's Experience

- Copyright remains with the authors
  (Creative Commons Attribution 4.0 License)
- Transparent peer review: submissions, decisions, comments and replies archived and publicly accessible
- High paper acceptance rate: 94 – 98% (2014–2023)
- Fair and constructive reviews

Article Processing Charges



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Unintended Disservice of FOSS

- **Solver Suite for Alkalinity pH Equations (SolveSAPHE—Munhoven, GMD 2013)**
  - pH and water chemistry calculation algorithms
  - implemented in supplemental FOSS code library
- **mocsy 2.0 (Orr and Epitalon, GMD 2015)**
  - carbonate chemistry routines for ocean models
  - standard carbonate chemistry package for the CMIP6 Ocean Model Intercomparison Project (Orr et al., 2017)

One FOSS Code Absorbed by Another FOSS

Reply to referee comment on submitted manuscript

"[W]e have now replaced [our scheme] with [his] new algorithm [SolveSAPHE ...]. [Results] are identical to at least the 6th digit after the decimal in terms of pH, but [the] new approach is about 5 times faster than our old scheme."

James Orr (AC C1749, 15th Sep 2014)
'Author comment on RC C622
(Review from Guy Munhoven)'

Impact on Citations

Paper	Citations (Crossref)	Views (23th October 2023) Total	Downloads
mocsy 2.0 (Orr & Epitalon, 2015)	69	5431	1653
CMIP6-OMIP protocol (Orr et al., 2017)	107	8233	2576
SolveSAPHE-v1 (Munhoven, 2013)	22	9782	7157

Please do not get me wrong on Open Science

- **SolveSAPHE-r2 (Munhoven, GMD 2021; Zenodo 2021a,b)**
- **MEDUSA v2 (Munhoven, GMD 2021; Zenodo 2020, 2021, 2022)**
- **µXML (Munhoven, Zenodo, 2020)**
- ***This* document**
  - is in OpenDocument Presentation (ODP) format
  - was created on the FOSS office suite LibreOffice 6.1.5.2
  - which was run on the FOSS Operation System Debian 10.13

Science

is not science

unless it is open