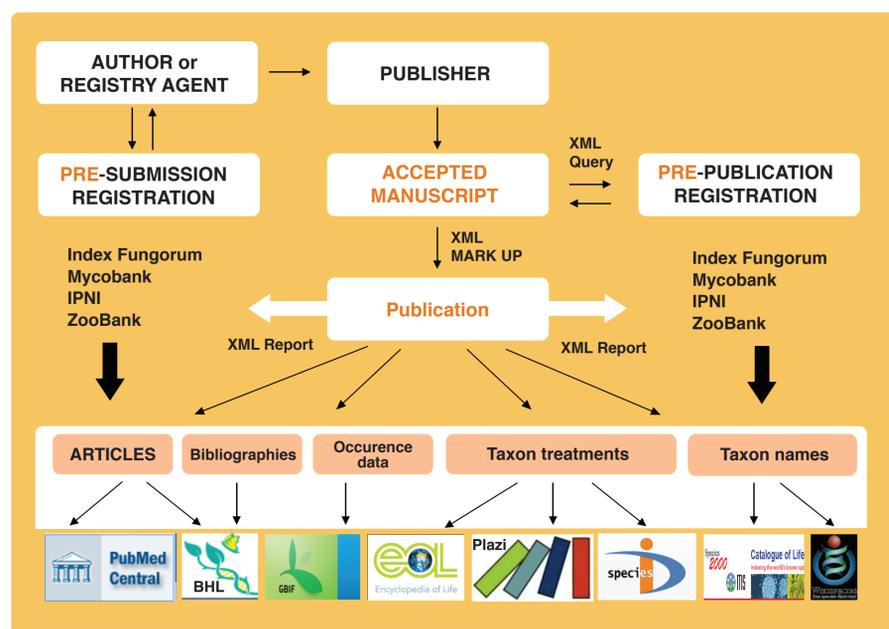


A common, automated, pre-publication registration model for higher plants (International Plant Names Index, IPNI), fungi (Index Fungorum, MycoBank) and animals (ZooBank)

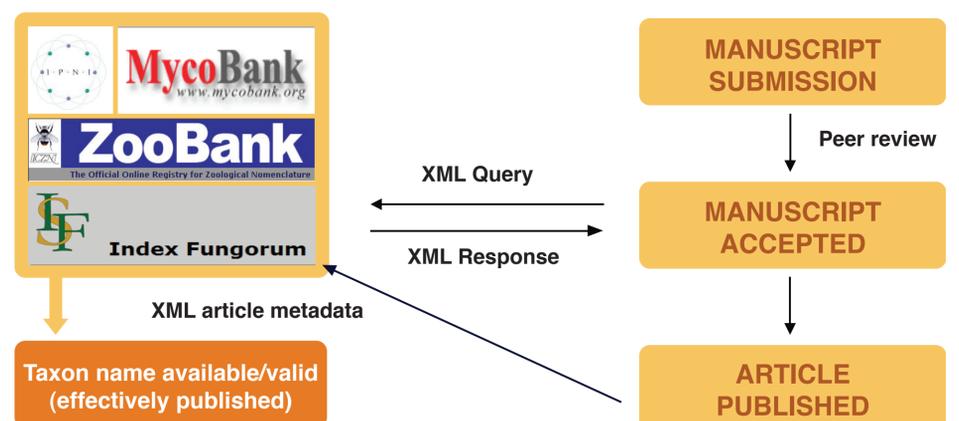
Lyubomir Penev^{1,2}, Teodor Georgiev², Pavel Stoev^{2,3}, Jordan Biserkov², Christine Barker⁴, Nicola Nicolson⁴, Paul Kirk⁴, Alan Paton⁴, Christopher Hopkins⁴, Vincent Robert⁵, Richard Pyle⁵

The process of post-publication recording and indexing of taxonomic and nomenclatural acts has a long tradition, in some cases dating as far back as the middle of 19th century (e.g. Index Kewensis, Zoological Record). The online publication of nomenclatural novelties brought into focus the concept of pre-publication registration and inclusion of the registries' persistent identifiers in the publications. This process has become mandatory in fungal and animal nomenclature due to the amendments to the nomenclatural Codes accepted recently; pre-publication deposit of botanical names is conducted on a voluntary basis with selected journals, and a registration **pilot** is planned.

Two parallel workflows



Automated registration



The registration process

- **Step 1.** XML query from the publisher to the registry on the day of acceptance of the manuscript (containing the type of act, taxon names and ancillary data, and preliminary bibliographic metadata)
- **Step 2 a.** XML response from the registry to the publisher containing either the unique actionable (resolvable) identifier of the act, or notification of a potential error (e.g. relating to non-conformity with the nomenclatural code)
- **Step 2 b.** Error correction and disambiguation performed manually: human intervention, at either registry's or publisher's side (or at both)
- **Step 3.** Inclusion of registry identifiers in the treatments to be published (protologues, other nomenclatural acts)
- **Step 4.** Final XML report sent by publisher to the registry on the day of publication (exact bibliographic details of the published article: authors, title, journal, issue no, date of publication, pagination)

An automated registration pipeline is prototyped in collaboration between the registries IPNI, Index Fungorum, MycoBank, and ZooBank and Pensoft's journals ZooKeys, PhytoKeys, and MycoKeys, within the FP7 project pro-iBiosphere.

1 Institute for Biodiversity and Ecosystem Research, Bulgarian Academy of Sciences, Sofia, Bulgaria, 2 Pensoft Publishers, Sofia, Bulgaria, 3 National Museum of Natural History, Sofia, Bulgaria, 4 International Plant Name Index (IPNI) and Index Fungorum (IF), Royal Botanical Gardens Kew, UK, 5 Mycobank, CBS Fungal Biodiversity Centre, Utrecht, The Netherlands, 6 ZooBank, Bishop Museum, Honolulu, USA

Contact: Lyubomir Penev, info@pensoft.net

PENSOFT

