



Policy on Collaboration of RAs in the DOI System

- The following are general requirements and procedures for resolving conflict between RAs and encouraging collaboration to the benefit of the DOI community.
- The IDF-RA Agreement requires RAs to “respect rights of other registration agencies” (section 4d. Respect rights of other Registration Agencies), which indicates that RAs should not “poach” customers from another RA, but neither should they be required to decline approaches from a customer who may already be using another RA. **Customers may, if they wish, use more than one RA service.**
 - The only **exception** to this policy is when the IDF Board has agreed terms and conditions of a specific exclusive arrangement with an RA for a specific service or sector.
- **IDF and RAs wish to avoid confusion in the market;** to enable RAs to offer services using the DOI System; to give RA’s customers or members flexibility; and to ensure efficient operation of the RAs and the DOI System.
- **Potential transfer of customers.** RAs should not place barriers in the way of customers who wish to transfer to another RA. The foremost technical issue in transfer is the one-to-one relation of prefix to Local Handle System. If two RAs, each running their own LHS, serve the same area or field (making it possible that a given customer may want to move from one RA to the other), such movement of DOIs is easiest at the prefix level. If the initial RA uses a single prefix across multiple customers there is no easy way to move the DOIs for one customer while not moving the DOIs for the other customer. To facilitate customer transfer:
 - **RAs should ensure that customers are informed** that (a) they are free to choose an RA and move between RAs; (b) RA services vary and that they won’t necessarily have access to the same services if they move.
 - **Separate prefixes:** RAs should allocate at least one separate prefix for each customer, and where appropriate more than one



(e.g., a single company that has three easily identifiable divisions, imprints, product lines etc. may best be considered three 'customers' for the purposes of prefix allocation, on the assumption that at some point in the future the company could split along those lines). There is no penalty to using as many prefixes as useful and RAs are encouraged to work in this direction.

- **Shared LHS:** It is possible to have a single LHS across multiple RAs. RAs are not required to run any part of their own LHSs (although most do). Giving multiple RAs administration privileges on varying sets of DOIs in the same LHS is not a problem. Where two or more RAs see a benefit in such sharing, IDF will encourage the sharing of a single LHS.
- **Avoidance of co-reference (multiple DOIs for a single entity).** A DOI name shall not knowingly be assigned to an entity for which a DOI name has already been assigned by another RA. The occurrence of multiple DOI names for a single entity may occur accidentally (e.g. a customer obtaining a DOI name through one RA, and also registering the same entity through a second RA, perhaps to take advantage of different services) but this should be corrected when known, and avoided by design. While there are no technical restrictions on registration of multiple identifiers for a single resource this may be inefficient and hinder wider interoperability.
 - **Co-reference (the “same as” relation) is contextual** and may depend upon the RA’s application. If there is any doubt as to the occurrence of co-reference, RAs should as a minimum **share appropriate metadata** of their relevant registrations in order to ascertain duplication, divergence, or other relationship.
 - **Where RAs are aware that co-reference has occurred:** at minimum a link recognising the multiples as equivalents is to be established; failure to establish such a link would result in “misses” for any attempt to return comprehensive information from different systems. It is highly preferable that one of the multiples is used and replaces all others.
 - **RAs should take steps to avoid future co-reference.** Where two services are likely to result in co-reference RAs should reach agreement to prevent it. This does not imply any restriction on the provision of an RA services, i.e. it is not necessary for one service to be withdrawn: the two services are allowed, but should be made compatible where feasible.

- **Where multiple services are offered for the same entity**, RAs are encouraged to make use of DOI technology (Handle typing, multiple resolution, vocabulary mapping etc.) to facilitate multiple services using the same identifier (DOI name).
- **Avoidance of false co-reference** (multiple DOIs asserted as a single entity but not in fact the same entity). If such an equivalence is claimed but is not in fact in existence (i.e., if entity A and B are claimed to have the same referent, but in fact they do not), any attempt to return comprehensive information from different systems will result in conflicts. If false co-reference is reasonably suspected:
 - **RAs should share** kernel metadata of the relevant registrations in order to ascertain duplication or divergence or other relationship. Where kernel metadata of the relevant registrations is insufficient in order to ascertain duplication or divergence, RAs should share additional metadata of the relevant registrations and service.
- **Sharing of DOI kernel metadata** (which is required to be public) with other RAs shall not be unreasonably withheld. Where sharing is requested, metadata shall be made available in the best available machine-readable form.
- **Sharing of additional metadata beyond the DOI kernel** which is not required to be public is not a requirement of RA collaboration (other than in the case of preventing co-reference etc. as noted above); RAs may share such data if they wish.
- **Sharing of customer data** is not a requirement of RA collaboration, but is allowed and encouraged when such sharing is of data not considered to be of a commercially sensitive nature, does not disadvantage one party at the expense of another, and does not diminish healthy competition in relevant markets. Such sharing may, for example, suggest future possibilities for creating new services for customers and wider community which may not be possible through one RA alone.
- **RAs are encouraged to share technical and procedural advances** with other RAs, especially when doing so would benefit all RAs without harming the originating RA in any way.
- **RAs shall inform other RAs and IDF** of any issues brought to their attention which may reasonably be expected to impact on the DOI system future performance or reputation.

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