Questions to Bob Kahn

During the web-interview with Dr. Robert Kahn at 6.12.2016 a number of questions were raised by participants, but could not be answered.

Here we want to list the questions and give some answers.

1. A question actually came up at my institution within the last few days: does the assignment of DOIs to research outputs increase their \*discoverability\*? I think not, but would appreciate any arguments to the opposite.

*This question has been answered to a certain extent. PIDs could be associated with metadata directly and then one could use that information for searches. In general one would use the PID record however to refer to the metadata record. DataCite associates metadata already with PIDs. If this is being done systematically by everyone, then PIDs can be seen as anchors to start searches and even machines could find the right information.*

1. Hi Bob, what do you think about identifiers for research equipment?

*Also this question we touched briefly. Some people managing large machines (accelerators) store the whole configuration context of an experiment in a configuration file (which is metadata about equipment) and give this digital representation a PID to make it citable. In the digital world a physical object should have a representation (some metadata) which is a digital object as anything else and it could have a PID.*

1. Hi Bob, how do you foresee the DNS-like service to relate the addressing space (IPv6 eventually) with the identifier system?

*(This question we did not address and we should ask Bob about it)*

1. Surely, the difference between an identifier system like an IP address and an identifier system for a digital object is the difference between activity and passivity i.e., something with an IP address is able to respond to a protocol operation whereas something with a DOI can't?

*(This is more of an answer to the previous question. We should ask Bob to comment)*

1. Hello Bob, in the context of DONA and the issues of finding trusted and sustainable governance for digital infrastructures do you see any place for the promises of disintermediation using distributed ledgers to solve some of these issues?

*(Bob gave an explanation, we should ask Bob again to make a few sentences)*

1. What are your thoughts on the role of IRIs in W3C's Linked Data approach as digital object identifiers?

*IRIs are generalised URIs that do not include the character set limitation of the URIs anymore, i.e. they can contain characters from the* [*Universal Character Set*](https://en.wikipedia.org/wiki/Universal_Character_Set) *(Unicode/*[*ISO 10646*](https://en.wikipedia.org/wiki/ISO_10646)*). As Bob said, there will be different identifier schemes for different types of purposes. It will be important to ensure that such IDs will be resolvable to useful information and the problems with URIs in general are well-known. In the data domain it is obvious that many people rely on Handles (DOIs) and other similar concepts to make sure that they can assign IDs associated with useful state information.*

1. Should we use the concept of 'persistent' Identifier in the internet context while it would be very difficult to maintain the consistency and persistency?

*This question was dealt with briefly. Persistency is primarily dependent on social agreements. Internet registries for example are persistent, since we really invest money globally and nationally to keep the system running and we will do so as long as we see a general value in the internet functionality. The same will be true for “persistent identifiers”. It is us as community that needs to invest to make it persistent and it’s a matter of policies to take care that they will be used consistently. The DONA Foundation did its part to create a Global Root Network that is based on a solid business model and on a set of rules. All services below the global root network need to be based on agreements still to be made. Most probably national agreements will be required again to come to robust and persistent services.*