### Issue 613: Inverse shortcuts

CEO maintains that:

* Weak inverse shortcuts are to be represented as axioms of the form   
  lefthandside(x,y)⇒ (∃z)[righthandside(x,y,z)],   
  which he believes should be avoided. However, previous discussions for issues 617, 616 have revealed that from an ontological point of view they do not pose a problem, so he’s OK with keeping them.
* A new term should be introduced instead of the opaque “Weak Inverse Shortcut” (though it’s not the most pressing thing to do)
* Make a list of all weak inverse shortcuts in CRMbase and family models. In his HW he has provided such a list for CRMbase and CRMarchaeo (details [here](https://cidoc-crm.org/sites/default/files/613%20%E2%80%93%20Christian-Emil%E2%80%99s%20list%20of%20candidates%20for%20WIS.docx)). Maintainers of other family models should do the same.

**Discussion points**:

The weak/strong shortcut definitions appeared in the introductory section of the CIDOC CRM. At some point, a decision was made to not distinguish among the two types and the relevant text was subsequently deleted, on the grounds of never having encountered them in practice. Since then, all shortcuts are merely referred to as plain “shortcuts”.

The introduction explicitly states that there are no inverse shortcuts. But we have had shortcut properties such as P26, P27 since the beginning. It is probably a mistake -part of an overzealous editing.

**Proposal:**

* Relabel the types of shortcut in a more intuitive way, namely:
  + **Shortcut**: indicates that the long path implies the short path.
  + **Inverse shortcut**: indicates that the short path implies the long path
  + **Strong shortcut**: indicates an equivalence relation between the long and the short path
* Introduce the terms above in the specification document of CIDOC CRM (under Terminology).
* Check CEO’s list. Mark the properties in the text as shortcut, inverse shortcut, strong shortcut.

The SIG voted on the proposal (introduce terms for “shortcut”, “inverse shortcut”, and “strong shortcut” in the terminology; characterize shortcut properties as such in the declarations.   
**Outcome of the vote.**  
In favor: 12 (8 in person, 3 online)  
Against: None  
(18 participants abstained)