

***OECD Minimum Data Set (modified from the CABRI guidelines<sup>1</sup>) and the ABCD schema v. 1.3***

This is my attempt to map the MDS data items to ABCD elements. As you will note, I have taken a pragmatic approach and added a number of elements to the culture collection domain of the unit, wherever overlap with other types of collections is not given.

W. Berendsohn, 28 Jan 2004.

|  |  |
|--|--|
| <p><b>BRC<br/>(Modified<br/>CABRI)</b></p> | <p><b>ABCD 1.23 [comments in brackets]</b><br/>Implicit path: Datasets/Dataset/Units/Unit/ if xpath does not start with /Datasets</p>  |
| <p>1. Accession number</p>                 | <p><b>EITHER</b> UnitID [which would imply a repetition of SourceID, where the collection acronym must be given in ABCD]<br/><b>OR</b> /Datasets/Dataset/OriginalSource/SourceID + “ “ + UnitID<br/><b>OR</b> UnitID+”@”+ /Datasets/Dataset/OriginalSource/SourceID</p> <p>[I am not sure which definition is valid. OECD 2003, p. 2. states: “This report proposes for the level 1 document the GSBRC number (e.g. GSBRCnnnnn) which will be assigned by a GSBRC secretariat to the member. A specimen will automatically be given a unique number in this format XYZmmmmmm@GSBRCnnnnnn.”. OECD 2003, p. 8: “consists of collection acronym followed by a number or alphanumeric identifier separated with a blank Make sure unique number is given to each strain”.]</p> |
| <p>2. Other culture collection numbers</p> | <p><b>EITHER</b> as a semicolon separated text under UnitStateDomain/SpecimenUnit/SpecimenUnitHistory/PreviousUnitsText<br/><b>OR</b> as individual concatenated numbers under UnitStateDomain/SpecimenUnit/SpecimenUnitHistory/PreviousUnits/PreviousUnit/PreviousUnitText<br/><b>OR</b> as a reference to an ABCD identified unit by giving the three IDs (PreviousUnitID, PreviousSourceID, PreviousSourceInstitutionID) under UnitStateDomain/SpecimenUnit/SpecimenUnitHistory/PreviousUnits/PreviousUnit/</p>   |

<sup>1</sup> OECD 2003. Global Forum on knowledge economy: Biotechnology. Minimum Data Set (MSD) for describing BRCS and the domain of Microbes. Organisation for Economic Co-operation and Development, Directorate for Science, Technology and Industry, Committee for Scientific and Technological Policy, Working Party on Biotechnology. OECD DSTI/STP/BIO(2003)21 English.

|                           |   |
|---------------------------|---|
| 3. Restrictions           | UnitCollectionDomain/CultureCollectionUnit/Hazard [refers to the physical object, which I think OECD 2003: 8 refers to; for restrictions as to the use of the <u>data</u> record the element RecordRights/SpecificRestrictions should be used.]   |
| 4. Organism type          | UnitCollectionDomain/CultureCollectionUnit/OrganismType<br>New Element in ABCD v. >1.21.<br>[Purist's would like to put this under identification, higher taxon, but I guess we should be pragmatic about this. UnitCollectionDomain itself cannot be used to identify the unit as it has been suggested, it only represents a domain specific substructure]  |
| 5.Name                    | Identifications/Identification/ TaxonIdentified/ScientificName/FullScientificNameString [was "NameAuthorYearString" in v. 1.20]<br><b>AND</b> [if atomized data available] in elements under<br>Identifications/Identification/ TaxonIdentified/ScientificName/NameAtomized/Bacterial/*<br>[However, Pathovar can only be included in FullScientificNameString, same as the possibility to include the accession number of the sequence in DDBJ/EMBL/GenBank in the case of viable yet-to-be cultured strains.] |
| 6. Infrasubspecific names | UnitCollectionDomain/CultureCollectionUnit/InfrasubspecificName<br>[A new element in v. >1.20]  |
| 7.Status                  | UnitStateDomain/SpecimenUnit/NomenclaturalTypeDesignation(s)/TypeStatus   |
| 8. Other names            | Identifications/IdentificationHistory   |
| 9. History of deposit     | UnitStateDomain/SpecimenUnit/SpecimenUnitHistory/PreviousUnitsText<br>[A new element in v. >1.20 as an alternative to the more structured one under PreviousUnit]   |
| 10 Condition of growth    | UnitCollectionDomain/CultureCollectionUnit/GrowthConditions   |

|                       |  |
|-----------------------|--|
| 11 Form of supply     | UnitCollectionDomain/CultureCollectionUnit/FormOfSupply<br>[A new element in v. >1.20]   |
| 12 Serovar            | UnitCollectionDomain/CultureCollectionUnit/Serovar<br>[A new element in v. >1.20]  |
| 13. Isolated from     | <p><b>EITHER</b></p> <p>UnitAssociation(s)*ID [if the substrate itself forms a Unit and is an organism]</p> <p><b>AND/OR</b></p> <p>Identifications/Identification/TaxonIdentified + Attribute Identification.Role set to “Isolated from”<br/>[if the substrate is an organism. A new attribute in v. &gt;1.20]</p> <p><b>OR</b></p> <p>Identifications/Identification/MaterialIdentified + Attribute Identification.Role set to “Isolated from”<br/>[if the substrate is not really an organism (e.g. a wall, a piece of leather, a piece of unidentified wood, or the like).<br/>A new element and attribute in v. &gt;1.20]</p> <p>[Please note: to be able to identify parasites/diseases etc. as part of the biological information referring to a certain taxon (e.g. a plant), the UnitAssociation or the taxonomic identification should be used, because this will allow searches under the respective name.]</p> |
| 14. Geographic origin | Gathering/GatheringSite/LocalityText   |
| 15 Mutant             | UnitCollectionDomain/CultureCollectionUnit/Mutant<br>[A new element in v. >1.20]   |

|                |  |
|----------------|--|
| 16 Genotype    | UnitCollectionDomain/CultureCollectionUnit/Genotype<br>[A new element in v. >1.20]   |
| 17. Literature | CultureCollectionUnitType/References/Reference<br>OR [for Type Strains]<br>UnitStateDomain/SpecimenUnit/NomenclaturalTypeDesignation(s)/NomenclaturalReference |