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Change Request #:	35
Assigned OGC Document #:	**09-185**
Name:	*Edward Nash
Organization:	*Rostock University
Email:	*edward.nash@uni-rostock.de
Document Name/Version:	*Web Processing Service / 1.0.0
OGC Project Document:	*05-007r7

If this is a revision of a previous submission and you have a Change Request Number, then check here: ☐
Enter the CR number here: [____]
Enter the Revsion Number that you are revising here: [____]

Title:	*Improve the possibilities for structuring WPS Application Profiles
Source:	*Rostock University / Edward Nash
Work item code:	
Category:	* B (Addition of feature)

Reason for change:	*
	Currently each WPS application profile is a standalone document defining a particular process. Each process offering from a WPS may then reference a profile. However, in practice, there may be many processes which are both semantically related and share a common set of input/output parameters (e.g. interpolation from a point dataset to a coverage, which may be implemented using many algorithms). Additionally, an implementer may wish to offer additional (optional) options to those defined in the Application Profile (e.g. extra input/output data types, additional input parameters cf. vendor-specific parameters for other OGC services, etc.). The process should in the latter case still be able to be called in the same way as one which implements exactly the profile.
Summary of change:	*
	To enable semantic hierarchies of WPS application profiles to be formed and to enable re-use of definitions, it should be possible to

define that an application profile "extends" another application profile (referenced by URN). This would require adding a suitable element or attribute to the application profile XML schema. The semantics of extends would be as for any inheritance in a normal programming language or model: the child process would have all the inputs/outputs of the parent plus the locally defined ones.

The disadvantage of this would be that the application profile would not be a self-contained document: implementers would have to also refer to the (possible multiple in an inheritance chain) parent profiles.

In order to allow a differential "implementsProfile" and "extendsProfile" in process offerings, the current "profile" element should be replaced with two suitably named ones.

Consequences if not approved:	1. one possibility for structuring and grouping application profiles would be lost (it would have to only be done through the URN naming). 2. implementers wishing to add further additional offerings when implementing an application profile would not be able to clearly indicate these extensions.

Clauses affected:	* At least 7.2, 9.3. Additionally, the schema for process description and application profiles must be separated to allow for the different "extends"/"implementsProfile"/"extendsProfile" structures.
Additional Documents affected:	
Supporting Documentation:	
Comments:	More detail on common parameters based on example of interpolation algorithms given in talk at Darmstadt SWG meeting. Each of the two changes could be implemented without the other, but I have rolled them into a single CR as they are strongly related.
Status:	Assigned
Disposition:	Reffered