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# CERIF 2008 – 1.0

## Semantic Layer Specification *for Review*

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**Editors:**

**Brigitte Jörg**, German Research Center for Artificial Intelligence  
(DFKI GmbH, Saarbrücken, Germany)  
**Keith Jeffery**, Science and Technology Facilities Council, Didcot, UK  
**Geert van Grootel**, Economy, Science and Innovation,  
Flemish Government, Brussels, Belgium  
**Anne Asserson**, University of Bergen, Bergen, Norway  
**Henrik Rasmussen**, atira A/S, Aalborg, Denmark  
**Adrian Price**, University of Copenhagen, Denmark  
**Thomas Vestam**, atira A/S, Aalborg, Denmark  
**Mikael Karstensen Elbæk**, Technical University, Lyngby, Denmark  
**Nikos Houssos**, National Documentation Center, Athens, Greece  
**Rita Voigt**, University of Technology Library, Helsinki, Finland  
**E. J. Simons**, Radboud University Nijmegen, the Netherlands

**Abstract:** The Semantic Layer Specification as part of the 2008 CERIF model is a new module in the current release that originates back to CERIF 2006 and allows for efficient maintenance and organisation of all CERIF semantics. With this document CERIF goes one important step further: filling the model with semantic content. We start by introducing semantics around the core entity *ResultPublication*. The current CERIF semantics have been developed from feedback at tutorial presentations, membership meetings, and from discussions on the CERIF TG mailinglist. Information Scientists, Librarians, Computer Scientists, Researchers, Managers, Practitioners and Engineers have presented and contributed their views.

**Status:** This document will be updated alongside ongoing CERIF updates.

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## 1. Introduction

With the latest CERIF 2008 release [1] we want to introduce semantics around the core entity Publication. We have elaborated on a scheme for publication types (2.1) and on the schemes for roles between person and publication (2.2) as well as organisations and publications (2.3) as presented below. The roles (2.4 - 2.10) are only an indication of next possible steps. The current semantics have been developed from feedback at Tutorial presentations, Membership Meetings, and from discussions on the internal CERIF TG mailinglist. Information Scientists, Librarians, Computer Scientists, Researchers, Managers, Practitioners and Engineers have presented and contributed their views.

## 2. CERIF Semantics / CERIF Classification Schemes

### 2.1 Publication Types

<b>cfPublicationTypes</b>	
	<b>Book</b>
	<b>Book Review</b>
	<b>Book Chapter Abstract</b>
	<b>Book Chapter Review</b>
	<b>Inbook</b>
	<b>Anthology</b>
	<b>Monograph</b>
	<b>Referencebook</b>
	<b>Textbook</b>
	<b>Encyclopedia</b>
	<b>Manual</b>
	<b>Otherbook</b>
	<b>Journal</b>
	<b>Journal Article</b>
	<b>Journal Article Abstract</b>
	<b>Journal Article Review</b>
	<b>Conference Proceedings</b>
	<b>Conference Proceedings Article</b>
	<b>Letter</b>
	<b>Letter to Editor</b>
	<b>PhD Thesis</b>
	<b>Doctoral Thesis</b>
	<b>Report</b>
	<b>Short Communication</b>
	<b>Poster</b>
	<b>Presentation</b>
	<b>Newsclipping</b>
	<b>Commentary</b>
	<b>Annotation</b>

### 2.2 Person-Publication Roles

<b>cfPerson-ResultPublicationRoles</b>	
	<b>is author of</b>
	<b>is author (numbered) of</b>
	<b>is author (percentage) of</b>
	<b>is editor (numbered) of</b>
	<b>is editor of</b>

	is subject of	
	is reviewer of	
	is translator of	
	is publisher of	
	has commissioned	

### 2.3 *OrgUnit-Publication Roles*

<b>cfOrgUnit-ResultPublicationRoles</b>		
	claims IPR of	
	is publisher of	
	is curator of	
	provides reviewer for	
	is author of	
	has commissioned	
	is funded by	
	is author institution of	
	is publishing institution of	
	is external organisation of	

### 2.4 *Project-Publication Roles*

<b>cfProject-ResultPublicationRoles</b>		
	is originator of	

### 2.5 *Publication-FundingProgramme Roles*

<b>cfResultPublication-FundingProgrammeRoles</b>		
	is funded by	

### 2.6 *Publication-Equipment Roles*

<b>cfResultPublication-EquipmentRoles</b>		
	is produced with	
	describes use of	

### 2.7 *Publication-Facility Roles*

<b>cfResultPublication-FacilityRoles</b>		
	is produced at	
	describes use of	

### 2.8 *Publication-Event Roles*

<b>cfResultPublication-EventRoles</b>		
	is input to	

	<b>is output from</b>	
	<b>is presented at</b>	

### 2.9 Publication-ResultPatent Roles

<b>cfResultPublication-ResultPatentRoles</b>		
	<b>is description of</b>	
	<b>describes use of</b>	

### 2.10 Publication-ResultProduct Roles

<b>cfResultPublication-ResultProductRoles</b>		
	<b>is description of</b>	
	<b>describes use of</b>	

## 3. The CERIF Semantic Layer from a Model Perspective

The CERIF semantics are maintained and organized within the Semantic Layer. For those interested, a model extract is presented with figure 1. The CERIF Semantic Layer consists of the two entities *cfClassification* and *cfClassificationScheme*. Each classification (*cfClassificationIdentifier*) is assigned to a classification scheme (*cfClassificationSchemeIdentifier*). A classification is named by a term and every classification term needs assignment to a particular scheme. The introduced publication types in the table above (2.1) are classification terms assigned to the scheme *cfPublicationTypes*; the same holds for roles as terms and their schemes as in the other examples (2.2 – 2.10). A mapping of terms is possible in the link entity *cfClassification\_Classification*, it moreover allows for the development of other structure types (hierarchies, ontologies). A mapping of schemes within the link entity *cfClassificationScheme\_ClassificationScheme* is also possible. For more details about the Full Data Model and other CERIF entities, we refer to [1].

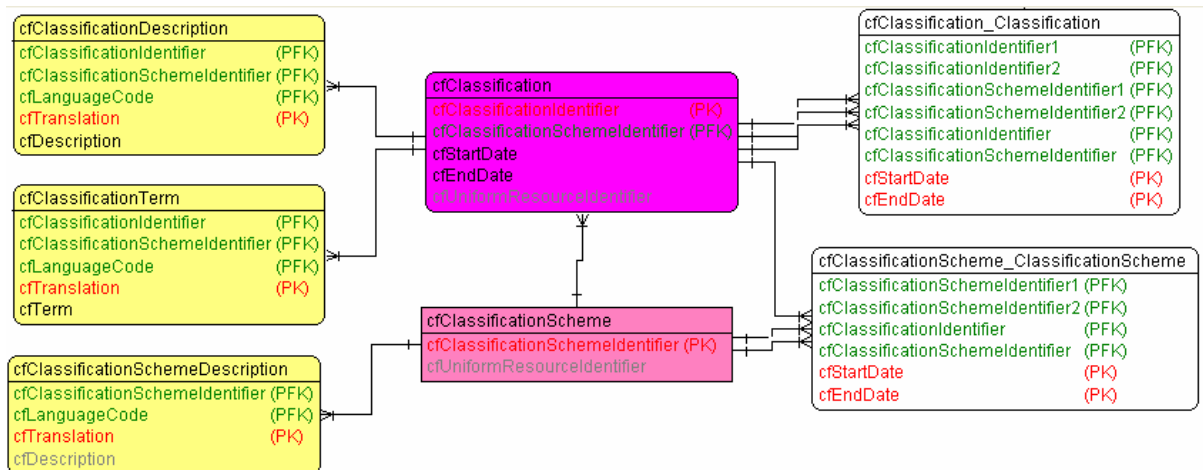


Figure 1: CERIF Semantic Layer: Extract from the CERIF Model.

## 4. Future Work

The Semantic Layer is a main focus for improvements in upcoming CERIF releases. The current version is a first step towards this direction. The semantic schemes will be further discussed and extended in the future. More Type and Role schemes for other entities will follow.

## 5. References

[1] CERIF 2008 1.0 Full Data Model (FDM) Introduction and Specification: <http://www.eurocris.org/>

[2] CERIF 2008 1.0 XML Specification: <http://www.eurocris.org/>