

Standard Recommendation S.R. CWA 14094:2001

# European Culturally Specific ICT Requirements

© NSAI 2001

No copying without NSAI permission except as permitted by copyright law.

Incorporating amendments/	corrigenda issued since pu	<i>iblication:</i>		
The National Standards Authorit documents:	y of Ireland (NSAI) produc	es the following categ	gories of formal	
.S. xxx: Irish Standard - na subject to public consultation.	ational specification based	d on the consensus of	an expert panel and	
S.R. xxx: Standard Recommoanel and subject to public consu	endation - recommendati ultation.	on based on the conse	ensus of an expert	
SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.				
This document replaces:				
This document is based on: CWA 14094:2001	<i>Published:</i> 24 January, 2001			
This document was published under the authority of the Nand comes into effect on: 24 September, 2011			ICS number: 35.240.01	
<b>NSAI</b> 1 Swift Square, Northwood, Santry Dublin 9	T +353 1 807 3800 F +353 1 807 3838 E standards@nsai.ie W NSAI.ie	Sales: T +353 1 857 6730 F +353 1 857 6729 W standards.ie		
Údarás ur	n Chaighdeáin Náisiúi	nta na hÉireann		



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

# WORKSHOP AGREEMENT

**CWA 14094** 

January 2001

ICS 35.240.01

European Culturally Specific ICT Requirements

This CEN Workshop Agreement can in no way be held as being an official standard as developed by CEN National Members.

© 2001 CEN

All rights of exploitation in any form and by any means reserved world-wide for CEN National Members

Ref. No CWA 14094:2001 E

Page 2 CWA 14094:2001

# **Table of Contents**

FOR	REWORD	3		
INTE	NTRODUCTION4			
1	SCOPE	5		
2	REFERENCES	6		
3	DEFINITIONS AND ABBREVIATIONS	6		
4	GENERAL	7		
5	ELEMENTS FOR THE CHECKLIST	8		
5.1	Sub-areas	8		
5.2	Characters	8		
5.3	Use of special characters	10		
5.4	Numbers, monetary amounts, letter written figures	11		
5.5	Date and time	12		
5.6	Telephone numbers and addresses, bank account numbers and personal identification	13		
5.7	Units of measures	14		
5.8	Mathematical symbols	14		
5.9	Icons and symbols, meaning of colours	15		
5.10	Man-machine interface and Culture related political and legal requirements	15		
ANNEY A (NORMATIVE)				

Page 3 CWA 14094:2001

#### **FOREWORD**

The production of this document which describes European culturally specific requirements on information and communications technologies was agreed by the CEN/ISSS Workshop European Culturally Specific ICT Requirements (WS-ESR) in the Workshop's Kick-Off meeting on 1998-11-23.

The document has been developed through the collaboration of a number of contributing partners in WS-ESR. WS-ESR representation gathers a wide mix of interests, coming from academia, public administrations, IT-suppliers, and other interested experts. The present CWA (CEN Workshop Agreement) has received the support of representatives of each of these sectors. A list of experts who have supported the document's contents may be obtained from the CEN/ISSS Secretariat. The final review/endorsement round of this CWA was started on 2000-02-17 and was successfully closed on 2000-mm-dd. The final text of this CWA was submitted to CEN for publication on 2000-mm-dd.

The CEN Workshop Agreement has only been made in English.

Page 4 CWA 14094:2001

#### INTRODUCTION

Information and communications technologies (ICT) have been and continue to be undergoing breakthrough developments. Computers started as being helpful tools for highly repetitive or number crunching applications. For the sake of minimising the then exorbitant cost of processing cycles, computer memory (where each bit was still in the 70's physically represented by a magnetic ring with three wires running through it) and direct access storage, there was initially precious little room for variance and/or fine details at the system level in the coding schemes for entering and storing the data and at the application level for presenting the data. Although the technology base for the restrictions has long since gone, the user community at large is still in its infancy in the appreciation of what flexibility for cultural adaptability can be requested and expected from modern ICT solutions.

The system vendor community is busily building the infrastructure to meet the known and anticipated user requirements for this adaptability. While doing this, they face a number of challenging questions:

- 1. For which aspects/elements in the system is there a genuine justification to require cultural adaptability (and what are the actual conventions to be used in each case)?
- 2. How to provide this adaptability for use in application software (and how to make the application software houses utilise it)?
- 3. How to bring this adaptability to the end user in a transparent and seamless manner?

In line with the Protection of Cultural Diversity theme driven by the Commission of the European Communities (CEC), the primary intent of this CEN Workshop Agreement is to address the first part of question 1 above for Europe. In order to do so, the requirements of European nations and cultural groups need be covered, as well as those stemming from the natural interactions between these groups, in addition to those imposed by formally pan-European application environments.

The evident answer to address both parts of the second question is to use standardised methods, be they agreed upon within the formal International Organization for Standardization (ISO/IEC JTC 1, "Joint Technical Committee 1 for Information Technology" and particularly its SC 22/WG 20, "Programming Languages / Internationalization") or European Committee for Standardization (CEN ISSS, "Information Society Standardization System" and particularly its TC 304, "ICT - European Localization Requirements"), the World Wide Web Consortium (W3C, particularly its "User Interface: Internationalization"), the Internet Engineering Task Force (IETF), or whatever, as long as the forum is widely accepted. For any general solution, each IT system platform and each application must be "internationalised" in order for them to be able to be "localised". Unless the various platforms provide similar and ideally identical mechanisms (including the APIs, Application Programming Interfaces) for a broad enough set, the cost and other benefits of portability for cultural adaptability will not materialise. The answer to the second part also implies that the answer to the second part of question 1 is available.

The third question is the ultimate dilemma for the vendor community: A set of default values for each group of users must be easy to select (which is fully under the control of the vendors) and support their cultural conventions without modifications (which cannot be controlled by the vendors). These values themselves are not addressed by this CWA since, in order for them to be reliable, they must be provided at source, i.e. by the proper representatives of each nation and cultural group. Mechanisms are being developed for the registration of these values (e.g. the original European pre-standard ENV 12005 and its fast-tracked international version, ISO/IEC 15897:1999, which is currently under major revision) in an authoritative (yet hopefully neutral), reliable manner. In addition, for Europe, CEN TC 304 has set up a project team for the population of the cultural registry (as per ENV 12005) and another CEN/ISSS Workshop ("Eurolocale") is addressing the (ENV 12005 based) default values for use in pan-European applications. Unfortunately, the registries only cover a relatively small number of cultural elements and even as such are only sparsely populated. On the other hand, past, regional or proprietary efforts are known to contain a number of errors, and cannot thus be used without considerable caution.

When dealing with the default values for the cultural elements, it should be noted that once standardised methods are being used, the market relevance for any particular set of elements known to be correct does not require extensive proof. The addition of a table driven selection is a marginal investment (provided an existing user interface including the keywords, error messages and help information may be utilised). In each and every instance, though, users must have the option to override any and all default values with their own personal, corporate or whatever preferences.

Culturally specific requirements are indeed culturally specific, i.e. the (established) cultural groups define them and can never be told what they are. Europe consists of several sovereign nations inside and outside the European Union. Even within the European Union, the strong subsidiarity principle guarantees that there can be hardly any pan-European conventions / cultural aspects that could be imposed on the national level, even for new elements such as the euro, the new currency of the European Monetary Union. As a consequence, no European standards (EN) can be expected in this area (since all CEN members are obliged to make each EN a national standard and withdraw any national standard that is in conflict with an EN). Truly pan-European applications, however, have a set of their own requirements to be met and European standards can thus be defined for them.

*Note:* Thus, each nation and cultural group is strongly urged to:

- 1. review that their inherent language and other cultural requirements are covered herein and
- 2. agree on one or more sets of the default values and submit them for registration. This is an area, where one cannot depend on the others, except for the implementation once the homework has been done. Not doing this homework is tantamount to a public denial of the need for others to respect one's cultural background.

### 1 SCOPE

This CEN Workshop Agreement defines a check list of Culturally Specific ICT Requirements, such as character sets, internationalisation and user interfaces, in Europe (see Annex A for coverage) that products and services developed on the framework of the Global Information Infrastructure need to cover and support. Currently there is no single source for an integrated set of information regarding culturally specific ICT requirements in Europe. Such a checklist provided by the CWA will assist in this regard.

The CWA also discusses the rationale for the requirements that affect the localisation of ICT systems and services. In addition to the requirements in a national / cultural application environment, the CWA identifies areas where national requirements still need be addressed even in pan-European applications.

The potential users of this checklist are: 1) suppliers and implementers who wish to provide products and services applicable to the relevant market, and service providers, in particular those who wish to operate across national borders, and 2) users and purchasers who wish to ensure that products and services are applicable to their use.

The list, however, does not constitute any procurement guidance as such.

In areas, where reliable sources exist for the specifics of the requirements, the CWA will refer to these sources.



**Product Page** 

- Dooking for additional Standards? Visit Intertek Inform Infostore
- Dearn about LexConnect, All Jurisdictions, Standards referenced in Australian legislation