

CEN

CWA 15535-2

WORKSHOP

April 2006

AGREEMENT

ICS 35.240.15

English version

**Multi-application multi-issuer citizen card scheme
standardisation - Part 2: Scheme architecture and
implementation solution**

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which is indicated in the foreword of this Workshop Agreement.

The formal process followed by the Workshop in the development of this Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN Management Centre can be held accountable for the technical content of this CEN Workshop Agreement or possible conflicts with standards or legislation.

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

This CEN Workshop Agreement is publicly available as a reference document from the CEN Members National Standard Bodies.

CEN members are the national standards bodies of Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland and United Kingdom.



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

Management Centre: rue de Stassart, 36 B-1050 Brussels

Table of Contents

<i>Foreword</i>	4
1 Introduction	5
1.1 MMUSST.....	5
1.2 The MMUSST environment	9
2 Scope and objectives	11
2.1 Scope of this document.....	11
2.2 Objectives of this document.....	12
2.3 Relationship with other material.....	13
2.3.1 CWA 15264 eAuthentication	13
2.3.2 SmartCities	15
2.3.3 eEpoch.....	15
2.3.4 eTicketing.....	15
2.3.5 Citizen IAS.....	16
3 References and terminology	17
3.1 Informative References	17
3.2 Abbreviations and Definitions of terms.....	20
3.2.1 Abbreviations	20
3.2.2 Definitions	23
4 Aiding progress in public administration	33
4.1 The transition to smart cards	34
4.2 Universal utility	35
4.3 Fundamentals of ICT methodology in citizen services.....	36
4.4 The system wide view	37
4.4.1 Quality and Security	38
Quality	38
Security framework and policy.....	39
Identification and trust.....	39
4.4.2 eServices.....	41
Data protection	42
4.4.3 Integration of legacy schemes	43
5 Scheme design and development	43
5.1 Scope	43
5.2 Process	44
5.2.1 Analysis in the technical area	46
5.2.2 Synthesis.....	50
6 Security framework	51
6.1 Introduction	51
6.2 The security dimension in the MMUSST model.....	52
6.2.1 Trust levels	52
6.2.2 Security processes	54
6.2.3 Identification, Authentication and Authorisation	55
6.2.4 Trust interoperability	56
6.3 Component security.....	56

6.3.1	Terminal equipment.....	56
6.3.2	Secure Application Module (SAM).....	57
6.4	Secure messaging.....	58
6.5	Hotlisting.....	58
7	Interoperability.....	59
7.1	Interoperability scenario.....	59
7.2	Interoperability architecture approach.....	60
7.3	Special needs and user convenience.....	60
8	Roles and Responsibilities.....	61
9	Architecture approach.....	64
9.1	Basic citizen service schemes.....	64
9.2	Terminals.....	67
<i>Annex A Transaction methods and eServices</i>		70
A.1	Introduction.....	70
A.2	User Related Information CWA 13987:2003 (eURI).....	70
A.3	ePurse and Loyalty.....	71
A.4	eTicketing and related services.....	72
A.5	Authentication.....	72
<i>Annex B Examples</i>		74
B.1	Review.....	74
B.1.1	Local schemes.....	74
B.1.2	Schemes working to a national specification.....	74
B.2	Moving to multi-application cards and multi-issuer.....	76
B.3	Partial case studies of developing schemes.....	78
	UK ID Card.....	78
	UK proposed citizen service card.....	79
	UK Scotland transport ticketing and other citizen services.....	79
<i>Annex C Mifare®</i>		81

Table of Figures

Figure 1 - Basic transaction architecture.....	7
Figure 2 - Roles.....	61

Foreword

This CEN Workshop Agreement has been drafted and approved by a Workshop of representatives of interested parties, the constitution of which was supported by CEN following the public call for participation made in 2005.

A list of the individuals and organizations that supported the technical consensus represented by the CEN Workshop Agreement is available to purchasers from the CEN Management Centre.

The formal process followed by the Workshop in the development of the CEN Workshop Agreement has been endorsed by the National Members of CEN but neither the National Members of CEN nor the CEN Management Centre can be held accountable for the technical content of the CEN Workshop Agreement or possible conflict with standards or legislation. This CEN Workshop Agreement can in no way be held as being an official standard developed by CEN and its members.

The final review/endorsement round for this CWA was started on 2006-01-06 and was successfully closed on 2006-03-13. The final text of this CWA was submitted to CEN for publication on 2006-04-05.

This CEN Workshop Agreement is publicly available as a reference document from the National Members of CEN.

This CEN Workshop Agreement is publicly available as a reference document from the National Members of CEN: AENOR, AFNOR, ASRO, BSI, CSNI, CYS, DIN, DS, ELOT, EVS, IBN, IPQ, IST, LVS, LST, MSA, MSZT, NEN, NSAI, ON, PKN, SEE, SIS, SIST, SFS, SN, SNV, SUTN and UNI.

Comments or suggestions from the users of the CEN Workshop Agreement are welcome and should be addressed to the CEN Management Centre.