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**EUROPEAN ECONSTRUCTION
ARCHITECTURE (EEA) - BLUEPRINT FOR AN
ICT SYSTEM IN CONSTRUCTION**

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WORKSHOP

March 2004

AGREEMENT

ICS 35.240.99

English version

European eConstruction Architecture (EeA) - Blueprint for an ICT System in Construction

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.

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Contents

Foreword.....	3
Introduction	4
1 Scope.....	5
2 Normative References	6
3 Definitions and abbreviations	7
3.1 Definitions.....	7
3.2 Abbreviations	7
4 Methodology.....	8
5 The ICT Architecture	10
5.1 The Global ICT Architecture.....	10
5.1.1 Resulting Scope for ICT Architecture	13
5.2 The ICT Architecture	15
5.2.1 Knowledge Management Trend.....	15
5.2.2 Model-based Trend.....	17
5.2.3 Information Sharing & Object Orientation Trend	19
5.2.4 Resulting ICT Architecture.....	21
5.3 ICT Architecture Component Characteristics.....	23
5.3.1 Open Standards Trend	23
5.3.2 Web-based Trend.....	24
5.3.3 Ambient Access Trend	26
5.4 ICT Architecture Key-Components.....	27
5.4.1 Language.....	28
5.4.2 Ontology.....	29
Bibliography	30

Foreword

The present CWA contains the description of an ICT Architecture and it is based on the more global and generic CWA on an European eConstruction Framework. It provides a common, global ICT "blueprint" for the Construction industry sector (positioned in Figure 1).

The present CWA is the second of a set of five CWAs describing ICT in the construction industry and produced by the CEN/ISSS Workshop eConstruction:

- 1) European eConstruction Framework
- 2) European eConstruction Architecture
- 3) European eConstruction Metaschema
- 4) European eConstruction Ontology
- 5) European eConstruction Software Toolset

It aims at setting the scene for innovation in the Construction industry sector.

This CWA has received inputs from many sources consolidating a great amount of views and perspectives on ICT in Construction. Acknowledgements to input received from various European R&D activities: FP5 IST eConstruct, e-Cognos, OSMOS, Divercity, E-CORE-network [E-Core], ICCI-cluster, ROADCON-roadmap [ROADCON] and ProdAEC [PRODAEC].

The content of this CWA was endorsed by members of the CEN/ISSS Workshop in eConstruction. The endorsement round started on 12 November and was concluded on 14 December 2003.

eConstruction Architecture

Context & Scope



Industry (Sub)Sector ▼		
Large Scale Engineering (LSE)	Construction	Buildings - residential - utility (offices) - industrial / technical
		Constructions Civil Infra etc. i.e. all non-Buildings
	Urban Regions & Cities	
	Process Plants	
	Ship Building	

Figure 1: ICT Architecture Context

Introduction

In a world where ICT components and their underlying technologies come and go there is a need for some stability in the form of a logical ICT architecture. This architecture can serve as a backbone providing overview and transparency that is sustainable in time and can identify ICT components and the infrastructure needed for linking and integrating these ICT components in the right way (*Figure 2*).

eConstruction Architecture

An Architecture, What is it ?



- ICT-oriented Blueprint
- A functional / logical view: no implementation details
- Things (“components”) and their Interrelations (“infrastructure”) gluing these things together

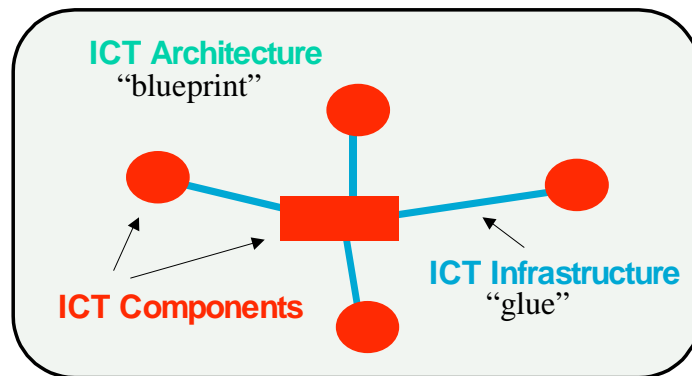


Figure 2: ICT Architecture, Components & Infrastructure

One of the underlying assumptions/paradigms is that, like any other company, a software vendor has to concentrate on his core business/competence. He can be good in one or some ICT application type(s) but he cannot be best at everything. For an end-user this often means that his complete 'ICT System' will be assembled of software components (applications, tools, data bases, ...) coming from different vendors preferably communicating via non-proprietary interfaces based on open standards for flexibility.

The architecture in this CWA essentially provides on a global/generic (and moreover, modest) scale a reference for an overview of such a heterogeneous ICT system in its context.

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