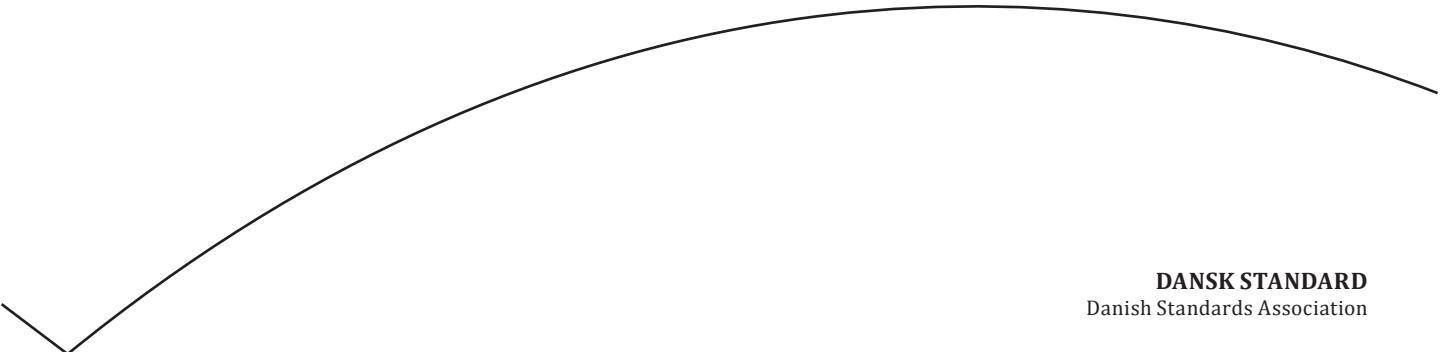


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Blockchain og distribueret hovedbogs-teknologi (DLT) – Overblik over smart contracts og deres interaktion i blockchain- og DLT-systemer

Blockchain and distributed ledger technologies –
Overview of and interactions between smart contracts in
blockchain and distributed ledger technology systems



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Contents

| | Page |
|--|-----------|
| Foreword | iv |
| Introduction | v |
| 1 Scope | 1 |
| 2 Normative references | 1 |
| 3 Terms and definitions | 1 |
| 4 Symbols and abbreviated terms | 2 |
| 5 Overview of smart contracts | 2 |
| 5.1 History of smart contracts | 2 |
| 5.2 Different ways of understanding smart contracts | 3 |
| 6 Operation of smart contracts | 4 |
| 6.1 The concept of a smart contract | 4 |
| 6.2 Benefits and challenges of smart contracts | 6 |
| 6.3 Difference between on-chain and off-chain smart contracts regarding deployment and execution | 7 |
| 6.4 Access of real-world-information for smart contracts | 8 |
| 6.4.1 General considerations about real-world-interaction | 8 |
| 6.4.2 One-way event delivery from a smart contract to an event consumer | 9 |
| 6.4.3 Transfer of control from a smart contract to an external process | 11 |
| 6.5 Life cycle of smart contracts: creation, operation, termination | 11 |
| 6.5.1 Overview | 11 |
| 6.5.2 Modifying smart contracts in a public BC/DLT system | 11 |
| 6.5.3 Update and roll-back mechanisms supported by the underlying ledger | 12 |
| 6.5.4 Migration mechanisms defined by smart contracts | 12 |
| 6.6 Security | 12 |
| 7 Binding and enforceable smart contracts | 14 |
| 7.1 General | 14 |
| 7.2 Legal enforceability of smart contracts | 14 |
| 8 Smart contracts for information transfer between blockchains (cross-chain and sidechain transactions) | 15 |
| 8.1 Introduction | 15 |
| 8.2 Implementations of cross-chain and sidechain transactions | 16 |
| 8.3 Importance of semantics, syntax, inputs and languages for the interoperability of smart contracts | 20 |
| Annex A (informative) Examples of smart contract implementations | 21 |
| Annex B (informative) Role of domain specific languages and methods | 24 |
| Annex C (informative) Applications and smart contract use cases | 26 |
| Bibliography | 43 |

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This document was prepared by Technical Committee ISO/TC 307, *Blockchain and distributed ledger technologies*.

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Introduction

Smart contracts, a synonym for automated applications on blockchain and distributed ledger technology-based (BC/DLT) systems, are an important development step from early stage, purely transaction oriented blockchains to more interactive technologies where the transactions on the blockchain or distributed ledger technology system are conditional on the terms of that application. According to the current working-definition of ISO/TC 307, WG1, Terminology, a smart contract is a

"computer program stored in a distributed ledger system wherein the outcome of any execution of the program is recorded on the distributed ledger".

In specific implementations of BC/DLT systems, such a program can vary from program code interpreted on single peers to (pre-)compiled programs recorded on the ledger to be executed on arbitrary virtual machines within the system (such as miners). It should be understood that the "effects" to be recorded on the distributed ledger will usually be the transaction that is the deterministic, predefined coded outcome from the smart contract code.

As the term smart contract in its original intention as created by Nick Szabo in 1994 had a different, mainly legally oriented (precise and legitimate) meaning, this has often caused confusion regarding "legally binding intentions": As this document discusses and describes smart contracts as a technology for BC/DLT automation in general, it is also important to understand that smart contracts may have a legal binding intention. Because of this, the legal binding application and structure of smart contracts also requires understanding of legal background, context and definitions.

This document mainly describes the aspects of automated software in a BC/DLT-system.

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Blockchain and distributed ledger technologies — Overview of and interactions between smart contracts in blockchain and distributed ledger technology systems

1 Scope

This document provides an overview of smart contracts in BC/DLT systems; describing what smart contracts are and how they work. It also discusses methods of interaction between multiple smart contracts. This document focuses on technical aspects of smart contracts. Smart contracts for legally binding use and applications will only be briefly mentioned in this document.

2 Normative references

There are no normative references in this document.