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# **SMART CONTRACTS: DO WE NEED NEW LEGAL RULES?**

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## Smart Contract (SC): Notion

Szabo: Computerized Transaction Protocol

Technology, not Contract

Description of “Contractual Relation”  
in the “Computerroutine”



## Characteristics of SC

Self-executing

Self-determined

Unchangeable

Digital Performance



## Specifics of SC

Technological (Legal) Security and Transparency

Low Transaction and Enforcement Costs

Digital “Expression” of Performance

“Bridge” to Offline World through Oracle

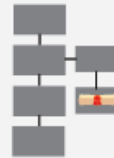
“Law is Code”



## Smart Contracts



Option contract written as code into a blockchain.



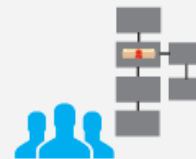
Contract is part of the public blockchain.



Parties involved in the contract are anonymous.



Contract executes itself when the conditions are met.



Regulators use blockchain to keep an eye on contracts.



## Contract Formation in Civil Law Countries

Exchange of Intent Declarations

Understandability of Programming Code?

Interpretation of “Computerroutine”?

Special Problem: General Business Conditions



## Contract Formation in Common Law Countries

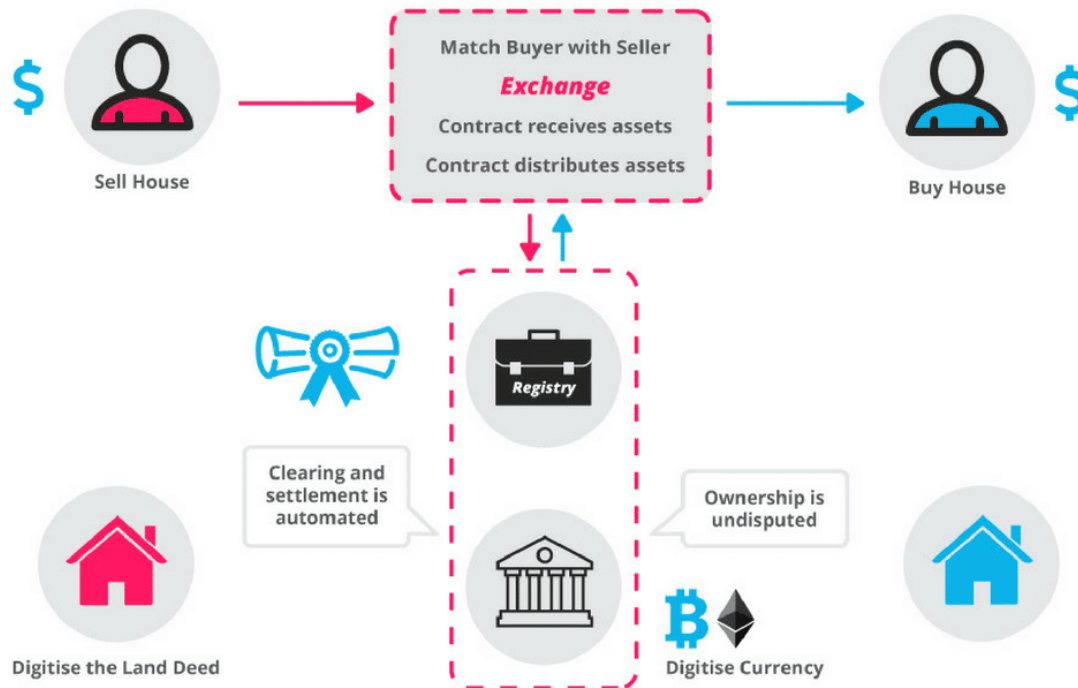
Enciphered Telegraphs (US Supreme Court)

Meeting of the Minds (Restatement Second, Art. 2 UCC)

Automated Means (UETA, ESIGN, UCITA)



### How Smart Contracts Works







## “Anomalies” in Contract Formation

Illegality

Form:

Contract in Writing

Substance:

Public Order, Immorality

Contestability

“Translation” Error

Basic Material Error



## New Legal Rules for Formation of SC?

No Adjustment Need in General

Narrowing of Requirement “in Writing”

Oracle Requirement for Illegality Situations

Standardization through Self-Regulation





## Performance of SC

Pacta sunt servanda

Limited Importance of Several Types  
of Contractual Non--Performance

Oracle as Auxiliary Person?



## Technology and Programming Failures in SC

Preventive Measures

Diligence Standards

Spheres' Theory: Allocation of Responsibility

Probability based on Artificial Intelligence



## Digital Execution and Enforcement of SC

Assignment Aspects

Securities' Requirements

Enforcement

Arbitration Library through Oracle

Procedural Issues



## New Legal Rules in Case of Non-Performance of SC

No Adjustment Need in General

Clarification of Auxiliary Person

Facilitation of  
Digital  
Execution

“Transfer” of Securities

Oracle / Arbitration Library



## Outlook

Innovative Interpretation of Existing Rules as “Solution”

Minor Adjustments Desirable

Facilitation of Digital Execution

