





# Electrical and Electronic Industries Workshop





# Czech Electro - Industry

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- Automation
  - Measurement and regulation ...
- Heavy current technologies
  - Drives, transformers, quality ...
  - Nuclear
- Appliances
  - Circuit breakers, distributors ...

Digitalization  
RTOS,  
SW,  
AI,  
Safety&Security,  
Blockchain

**B2B!!!**



# Czech Electro - Industry

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- Manufacturing industry almost 50% of GDP
- Electro is the most important (more than automotive)
- Focus on SME and R&D → stable industrial ecosystem
- Strong net of technical universities
  - Each district-city has at least one University with several faculties
  - The oldest was est. 1707



# Role of Association

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- Partner for Government
  - Labour Code
  - Trade unions
  - Taxation
  - Ecology
  - R&D incentives
  - Etc etc
  
- Entrepreneurs democracy principles:  
companies apply their opinion



# What makes business successful?

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- product
- price
- services
- timing
- market knowledge
- ...

we all know that .. but is it enough?



# business is more than money

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- Understanding each other
- Partnership
- Help(fullness)
- Trust
- Sharing same values

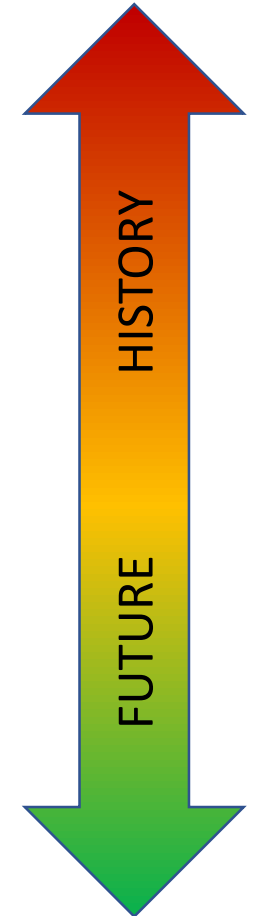




## Limited meetings, unlimited ideas

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- Electrical association (ELA) signed MOU with TEEMA 15 years ago
- Within this framework was made a lot of contacts, projects, exhibitions visits, seminars... (this is what we call long-term partnership)
- Related fields: electronics, lightning, software, energetics, components
  
- Blockchain







# Public blockchain: Digital bridge for global business





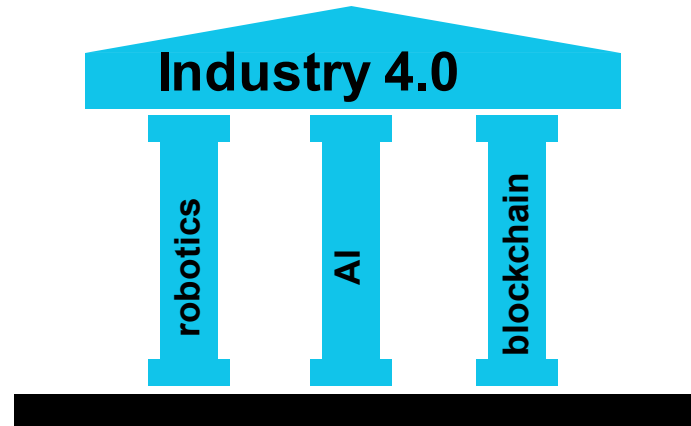
# My personal relationship to Taiwan

I have been collaborated with Taiwanese companies for 30 years





# Industrial blockchain



**Industry needs the industrial blockchain !**

usual certifications



full controll over the life cycle

design	installation	operation (production phase)	termination	liquidation
Design of consortium, policies, rights, cybersecurity analysis	generating of identities, and cryptography, installation packs assembly	monitoring a functionality of nodes and network network extension /reduction and reconfiguration software maintenance, upgrades, cybersecurity management	ledger content migration (if required)	safe deleting of ledger content, and software on all nodes



# The industrial blockchain supplier

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## **ELA Blockchain Services delivers the industrial blockchains**

**Company:** ELA Blockchain Services a.s. (joint-stock company)

**Established:** 2019

**Founded and fully owned:** by The Electrical and Electronic Association of the Czech Republic

**Present capital:** 500,000 USD

**Type of business:** Technological startup

**Purpose & goal:** to build and operate public blockchain as opened and trustworthy platform for industrial companies

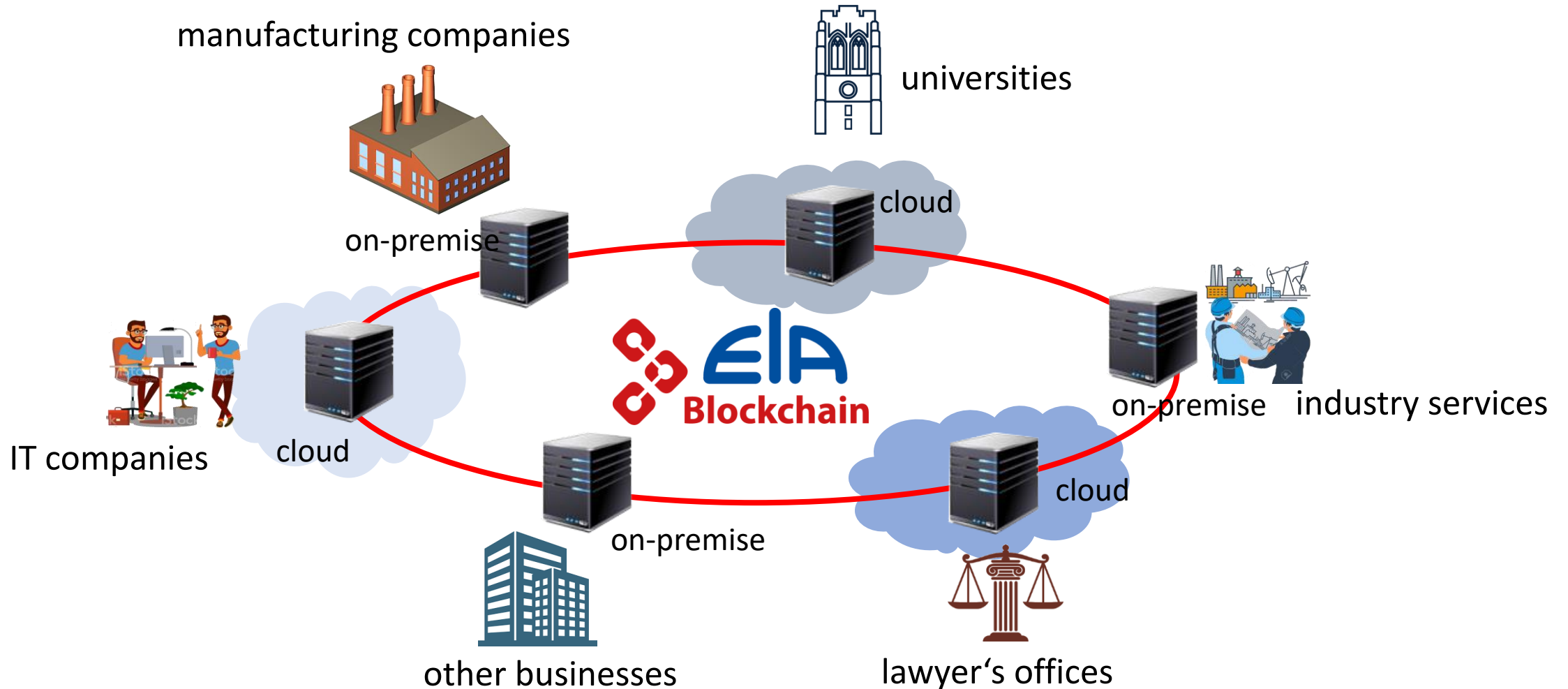
We do not provide a gateway to cryptocurrency blockchains (Ethereum)

We build industrial consortium type blockchain based on Hyperledger Fabric technology

This type of blockchain meets the requirements of industrial customers



# What is consortium blockchain?





# Not only idea, but a real blockchain

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**EIA blockchain consist of 30 independent nodes in ownership of important subjects**

**Industrial companies:** IBM, ABRA, Exaxt Control, ZAT, FCC ...

**Lawyer's offices:** Rowan legal, the leading office in digital law in the Czech Rep.

**Inspection & certification associations:** TÜV SÜD, Czech Accreditation Institute

**Government:** Czech Ministry of Industry and Trade

**Professional associations:** Czech Chamber of Commerce, Confederation of industry and Trade of the Czech Rep.

**Universities:** Czech Technical University (ČVUT), Tomas Bata University,

**The Czech Republic has become an interesting laboratory of industrial blockchain**



# The public list of EIA blockchain nodes

The screenshot shows the website 'Blockchain Notarius' with a blue header and a white main content area. The header includes the site name, a 'Kontakt' link, and language flags for CZ and EN. The main content features a circular logo with 'BLOCKCHAIN NOTARIUS' and a list of providers. A search bar and a dropdown menu for 'Zobrazeno 10 odkazů' are visible above the table. The table lists four nodes: MPO, CL, ČIA, and ZEP, with columns for name, owner, address, contact, availability, and a link.

Blockchain Notarius Kontakt CZ EN

Seznam poskytovatelů služby Blockchain Notarius. U kteréhokoliv z nich lze zdarma ověřit již registrovaný dokument. K samotné registraci dokumentu je nutné získat od majitele nodu přístup k neveřejné části aplikace Blockchain Notarius. Tato služba může být majitelem nodu zpoplatněna.

Zobrazeno  odkazů Vyhledávání:

Název nodu	Vlastník nodu	Sídlo majitele	Kontakt	Dostupnost	Přejít
MPO	Ministerstvo průmyslu a obchodu	Česká republika	<a href="mailto:rehak@mpo.cz">rehak@mpo.cz</a>	●	<a href="#">Odkaz</a>
CL	Černý Legal	Česká republika	<a href="mailto:cerny@cernylegal.com">cerny@cernylegal.com</a>	●	<a href="#">Odkaz</a>
ČIA	Český institut pro akreditaci o.p.s.	Česká republika		●	<a href="#">Odkaz</a>
ZEP	Zváz elektrotechnického priemyslu Slovenskej republiky	Slovenská republika	<a href="mailto:lasz@zep.sk">lasz@zep.sk</a>	●	<a href="#">Odkaz</a>

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<https://blockchainotarius.cz>



# Back to Taiwan

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**ELA Blockchain Services is an expanding company, seeking for partners and investors from abroad**

We are interested in expansion in regions:

- Asia
- Central and South America
- Africa

Why?

- these regions are open to adapt new technologies
- a blockchain is ideal to join the subject in regions that differ in people mentality, culture, legal system
- a blockchain provides a public authority independent on government, notary services, banks..

**we have started collaboration with Advantech in 2020**

**ADVANTECH**

*Enabling an Intelligent Planet*





# Blockchain Notarius on WISE-SaaS

The screenshot shows a web browser window displaying the product page for Blockchain Notarius on the WISE-Marketplace. The browser's address bar shows the URL: `wise-paas.advantech.com/en-us/marketplace/product/ela.blockchain-notarius?tab=product-details`. The page header includes the Advantech logo, the text 'WISE-Marketplace', a search bar, and links for 'Login' and 'Contact Us'. A navigation bar contains links for 'Products', 'Solutions', 'Resource', 'Partners', and 'Membership'. The main content area features a circular icon with 'BLOCKCHAIN NOTARIUS' text and the product title 'Blockchain Notarius'. A sidebar on the left lists 'Product Details', 'Service Architecture', and 'System Information'. The main content area has a 'Product Details' heading and an 'Introduction' section. The introduction text describes Blockchain Notarius as a blockchain-based application for digital property ownership registration on the EIA blockchain network. It details the service of registering data files and verifying their presence in the blockchain, and lists various types of digital files that can be registered. It also mentions the application's ability to provide proof of identity and status for various documents and logs. The text concludes by stating that Blockchain Notarius is a simple application built by a community of private companies as a reliable platform for industry and trade, and also as a public authority. A 'Feature Highlights' section is partially visible at the bottom, with one bullet point: 'Based on an independent blockchain network; the list of node owners is public'.

Blockchain Notarius

## Product Details

### Introduction

Blockchain Notarius® is a blockchain-based application for the simple registration of digital property ownership. It is installed on every node of the EIA blockchain network.

The Blockchain Notarius® application provides the service of registration of data files on the blockchain (save file hash), and the service of verification of whether a submitted copy of a file is identical to the registered original of a file (verification of presence of an identical hash in the blockchain).

It is possible to register any type of digital file: digital photos, audio files, videoclips, etc. Even binary files created by machine, such as the data log files of technical equipment, or records of communication among machines, can be registered.

Blockchain Notarius® then provides a proof of identity of a digital copy of a document (contract, agreement, medical documentation), evidence of status at a particular moment (photos, media files, operator logs), verification of authorship, or fact checking.

Blockchain Notarius® is the simplest of applications using the EIA blockchain; a unique project built by a community of private companies as a reliable platform for industry and trade, and also as a public authority.

### Feature Highlights

- Based on an independent blockchain network; the list of node owners is public



# Blockchain Notarius in Chinese

Blockchain Notarius    Slack | advantech-integration | ELA    Blockchain Notarius - Advantech


blockchain2.elachain.cz/#/

zh-cn    登录

## 电子文件 你可以信任的

BlockchainNotarius服务使用区块链技术来安全验证电子文件。

包含文件



(.pdf, .jpg, .png)

或

登录

DOC\_a93714bf-3fc1-3e1a-c15e-831fae135af5

文件将不会被上传, 文件仅用于计算散列码

[以纯文本格式输入文件散列码](#)

[搜索条目](#)

可以在不同的节点上验证条目的存在, 可以找到节点列表 [这里](#).  
如果要提交条目或使用元数据搜索条目 [登录](#)

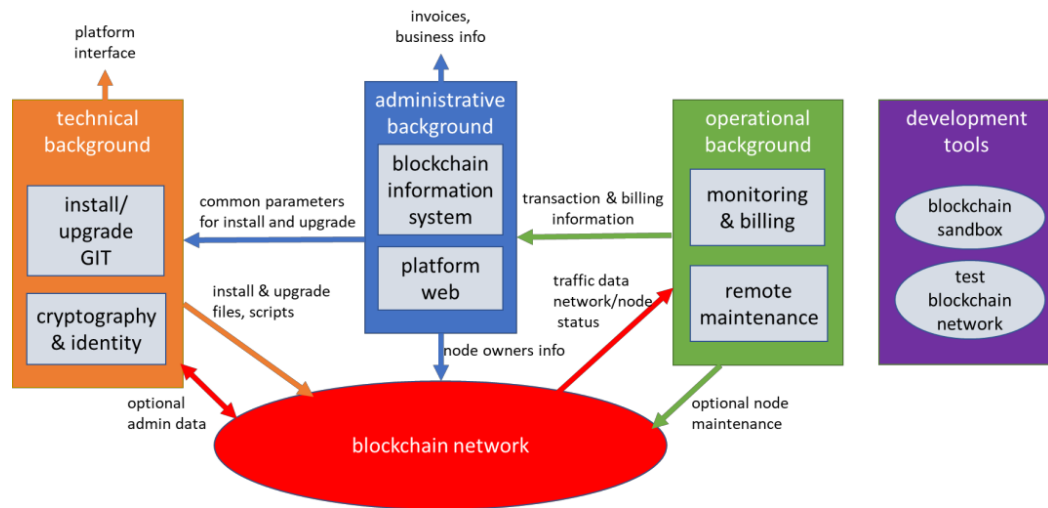
[關於](#)    [支持](#)



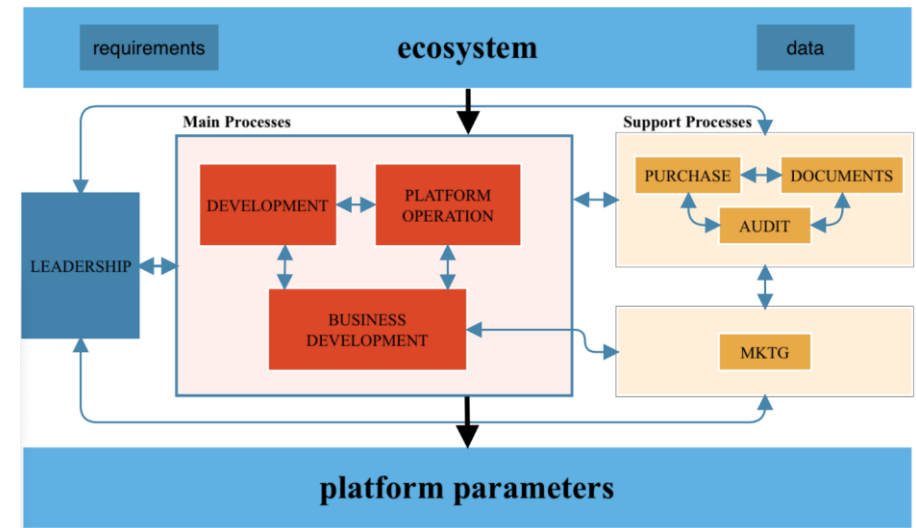
# Seeking for partners and investors

ELA Blockchain Services is now leaving the stage of successful small startup.

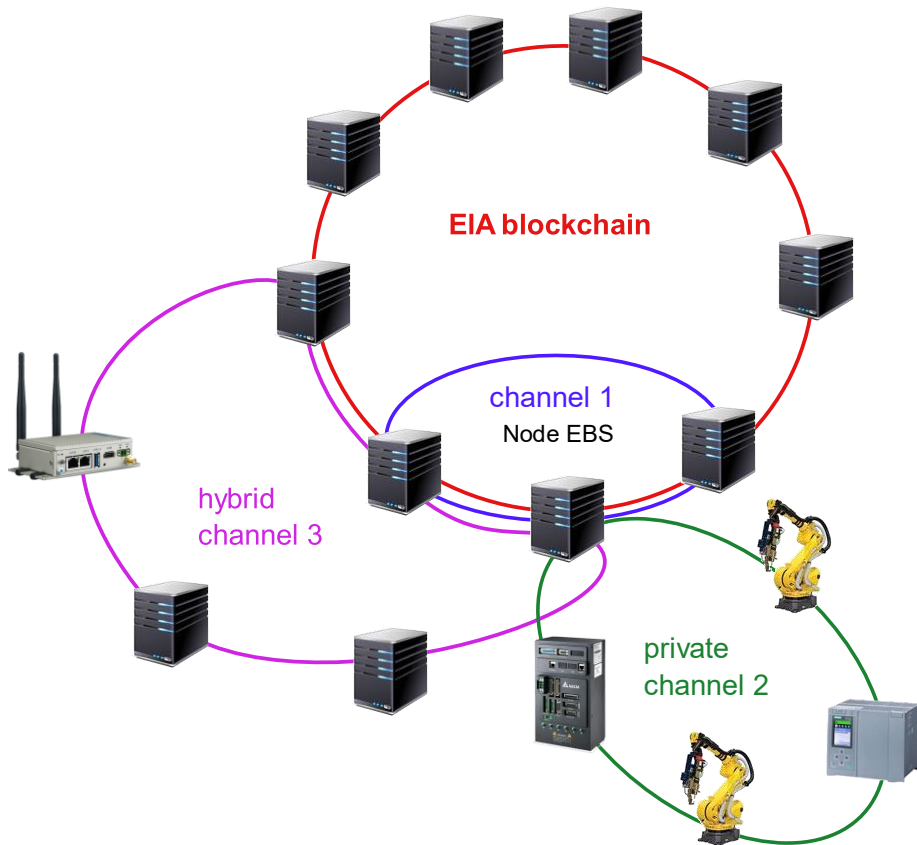
**For further development it needs investment and competencies for enter to international market.**



certified IT infrastructure



certified processes



## Unique competences

- The ability to build a consortium type blockchain network distributed not only in virtual space (cloud), but also in physical space.
- Providing blockchain platform for building many blockchain of various types

## Investor competitive advantages

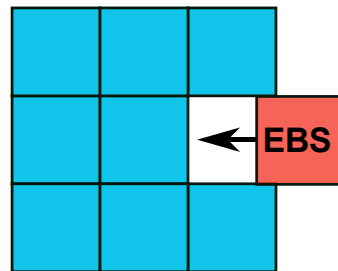
- Ahead of the game – EBS is only company in Europe enable to deliver industrial blockchains
- Hyperledger technology – no connection to cryptocurrencies
- Running public blockchain network in the Czech Republic
- Certified IT (ISO 27001) and QM (ISO 9001)



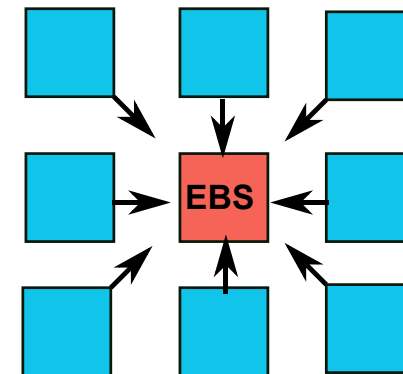
# Possible investment strategies

ELA Blockchain Services has been built as an „engine“, containing all necessary infrastructure, processes and know-how for providing blockchain solutions. It offers two possible investment strategies:

to expand a present company with the blockchain business



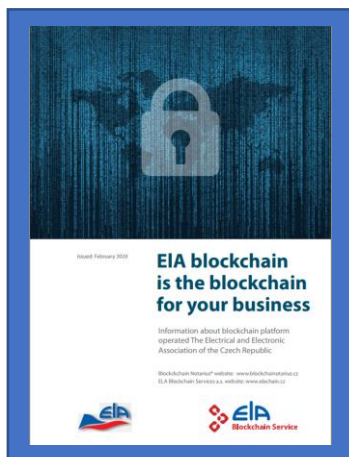
to create a new company dealing in the blockchain business





# Thank you for your attention

we can provide



## ...and other documents

Contact our shareholder:

## The Electrical and Electronic Association of the Czech Republic





# Electrical and Electronic Association of the Czech Republic

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