OPPONENT´S REVIEW OF MASTER'S THESIS

Name of student: Sara Spahić

Thesis title: Blockchain in Energy Sector

Reviewer : Pavel Čech, Ph.D.

Thesis objective: Explore possible use cases of blockchain technology in the energy sector and to identify, classify, and evaluate them.

Criteria required for evaluation	Evaluation scale (grade)					
	A	**B**	**C**	**D**	**E**	**F**
Content relevant to the field of study	☒	☐	☐	☐	☐	☐
Setting and meeting objectives	☒	☐	☐	☐	☐	☐
Treating theoretical aspects of the topic	☒	☐	☐	☐	☐	☐
Treating practical aspects of the topic	☒	☐	☐	☐	☐	☐
Adequacy of applied methods and their use	☐	☒	☐	☐	☐	☐
Depth and accuracy of implemented analysis	☐	☒	☐	☐	☐	☐
Dealing with literature sources	☒	☐	☐	☐	☐	☐
Logical structure and composition of the thesis	☒	☐	☐	☐	☐	☐
Language and terminology	☒	☐	☐	☐	☐	☐
Formal layout	☒	☐	☐	☐	☐	☐
Student´s contribution	☒	☐	☐	☐	☐	☐
Practical applicability of results	☒	☐	☐	☐	☐	☐

Comments to results of anti-plagiarism check:
The similarity reported by the anti-plagiarism system is 0 %.

Comments and recommendations:
The thesis is free from any major shortcomings. There are only minor recommendations that do not compromise the overall quality. The elaboration of Figure 6 might have been more thoroughly explained. It is not clear if the figure is a result of a mere union of use case classifications found in the literature or if a more sophisticated approach has been applied. The author might have tried to use appropriate qualitative or quantitative methods in order to assess for example the advancements or prospectiveness in the presented use cases.

Overall assessment and reasons for the final grade:
The blockchain represents a promising solution for decentralized storing of immutable data that goes beyond simple cryptocurrency transaction recording. The thesis is a well written overview of the application of the blockchain technology to energy sector. The

author demonstrated excellent capacity for working with literature resources. The author compiled over 100 references including most recent journal articles. The elaborated use cases prove a deep insight into the topic. The author managed to balance between complex technological details and a wide spectrum of applications. The thesis presents an extensive review in the selected field that is utilizable in academia and also in practise.

Questions for oral defence:
Which of the presented challenges in chapter 6 do you consider the most difficult?
What might be the rough timeframe estimate for successful commercial implementation of any of the presented use cases?

I recommend the thesis for oral defence.

Suggested final grade: A

Hradec Králové, 21/05/2021

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signature