

I. IDENTIFICATION DATA

Thesis title:	Distributed control on SmartWire Device Technology without a master node
Author's name:	Oxana Kovbasjuková
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Control Engineering
Thesis reviewer:	Pavel Dědourek
Reviewer's department:	Eaton European Innovation Center, ICPD

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment	challenging
<i>How demanding was the assigned project?</i>	
The diploma thesis topic describes customer needs, it reflects missing gap on Industry Automation market. Topic was split to more specific steps which was needed to fulfill to get the whole setup working. It was challenging to modify current application specific implementation by adding extra function there.	

Fulfilment of assignment	fulfilled
<i>How well does the thesis fulfil the assigned task? Have the primary goals been achieved? Which assigned tasks have been incompletely covered, and which parts of the thesis are overextended? Justify your answer.</i>	
There were specific steps which author went through successfully without compromises. All defined requirements were implemented in the way which can be directly used in final industrial product. She prepared set of tools which helps customer without deep knowledge of implementation. The whole chain was tested, and final demo presented. She achieved all set goals.	

Methodology	correct
<i>Comment on the correctness of the approach and/or the solution methods.</i>	
Student used all known technology in right way. Moreover, she extended SWD technology by new feature without touching current solution to have it backward compatible.	

Technical level	A - excellent.
<i>Is the thesis technically sound? How well did the student employ expertise in the field of his/her field of study? Does the student explain clearly what he/she has done?</i>	
Student showed that she is able to accept the challenge during work on proprietary industrial protocol which SmartWire is.	

Formal and language level, scope of thesis	B - very good.
<i>Are formalisms and notations used properly? Is the thesis organized in a logical way? Is the thesis sufficiently extensive? Is the thesis well-presented? Is the language clear and understandable? Is the English satisfactory?</i>	
Final thesis was written in understandable way but not detailed information are present there. It was written more like manual and she did not explain all difficulties she had and why she decided to do it in the way she did. At the end she resented her work clearly and It gives me good picture what she did, how it implemented and what results she achieved.	

Selection of sources, citation correctness	A - excellent.
<i>Does the thesis make adequate reference to earlier work on the topic? Was the selection of sources adequate? Is the student's original work clearly distinguished from earlier work in the field? Do the bibliographic citations meet the standards?</i>	
Due to the fact that student worked with proprietary industrial protocol which is not open, it means that this protocol in not available to public, she took enough documents which she used in correct way. It is possible to distinguish what is her part and what she reused. The bibliographic citation meets the internationally accepted standards.	

Additional commentary and evaluation (optional)

Comment on the overall quality of the thesis, its novelty and its impact on the field, its strengths and weaknesses, the utility of the solution that is presented, the theoretical/formal level, the student's skillfulness, etc.

Please insert your comments here.

III. OVERALL EVALUATION, QUESTIONS FOR THE PRESENTATION AND DEFENSE OF THE THESIS, SUGGESTED GRADE

Student described what she developed, how she did it and how to use it by using clear language. She showed ability to work with obstacles like proprietary industrial bus where it is not easy to find all needed information. She demonstrated that result of her work can be used, and she fulfilled all requirements which were defined on the beginning. She extended functionality of the bus and devices, deliver it as library which was missing. She prepared tool which is required by customers – to make the whole machine cheaper.

The grade that I award for the thesis is **A - excellent**.

Date: **28.8.2020**

Signature: