THESIS SUPERVISOR'S REPORT

I. IDENTIFICATION DATA

Thesis title:	**Wireless replacement of CAN based communication.**
Author's name:	**Denys Chereda**
Type of thesis :	master
Faculty/Institute:	Faculty of Electrical Engineering (FEE)
Department:	Dept. of Measurement
Thesis reviewer:	Assoc. prof. Jiří Novák, Ph.D.
Reviewer's department:	Dept. of Measurement

II. EVALUATION OF INDIVIDUAL CRITERIA

Assignment **challenging**

How demanding was the assigned project?

The assignment was focused on wireless CAN-like networking. I believe this topic is rather challenging for student of Cybernetics and Robotics program.

Fulfilment of assignment **fulfilled**

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 am convinced that all points of the assignment were fulfilled.

Activity and independence when creating final thesis **B - very good.**

Assess whether the student had a positive approach, whether the time limits were met, whether the conception was regularly consulted and whether the student was well prepared for the consultations. Assess the student's ability to work independently.

Mr. Chereda was systematically working on the theses. He was consulting problems and ideas regularly, but the consulting frequency should have been higher.

Technical level **C - good.**

Is the thesis technically sound? How well did the student employ expertise in his/her field of study? Does the student explain clearly what he/she has done?

Thesis result is a wireless CAN replacement based on proprietary ESP-NOW technology. Although the final solution was successfully tested for small scale network, I am convinced it is not able to fully replace CAN technology, especially in terms of reliability and message throughput. Nevertheless, such a result was expected and thesis shows where the wireless technology limits for similar applications are. I would also welcome a more systematic testing process, providing more detailed information necessary for practical deployment.

Formal level and language level, scope of thesis **B - very good.**

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 have no major comments to the theses form and language level. The theses are written in good English and contain acceptable number of mistypes.

Selection of sources, citation correctness **B - very good.**

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?

Theses follow the citation rules; student's work is clearly distinguished from the already published sources. I just miss the CAN technology sources, as it is a basis for the thesis.

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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.*

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

Summarize your opinion on the thesis and explain your final grading.

Mr. Chereda was systematically working on his thesis topics and he has mostly used proper design and implementation methods. Final wireless CAN replacement is working with described limits, which was proved by functional tests.

With respect of some issues mentioned above,

the grade that I award for the thesis is **C - good.**

Date: **2.9.2020** Signature: Jiří Novák