



ORGANISATION EUROPÉENNE POUR LA RECHERCHE NUCLEAIRE  
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**To whom it may concern,**

Michal Dudek has been a staff member at CERN since August 2013. He was employed within the Technology Department, Electrical Power Converters Group, Converters Controls Software Section. The mandate of the TE-EPC-CCS Section is to design, develop and maintain real-time and industrial software for large scale, distributed control systems for power converters. Moreover, TE-EPC-CCS is responsible for providing software solutions for managing and interlocking critical infrastructure installations for the CERN accelerator complex ( $\pm 10$  machines), whose electrical power exceeds hundreds of MW.

I have known Michal since his recruitment and have closely collaborated with him in the context of the ACCOR project (5 year multi-billion project for the rejuvenation of the controls system for all LHC injectors) and in my role of accelerator controls operation manager for all CERN accelerators and experiments.

Michal has collaborated on a large number of projects related to design, development and maintenance of distributed real-time and industrial control systems. He was responsible for managing control system projects from capturing users' needs and constraints, performing functional analysis of requirements, defining software and hardware architecture, developing, deploying, integrating, configuring, documenting and commissioning the control systems. Moreover, in collaboration with the Beam Department Controls Group and CERN accelerators operation teams, he has driven continuous improvements of existing systems. Michal has outstanding human qualities, he is open, trustworthy, communicative and extremely devoted to his work. Thanks to his expertise in distributed control systems, software development, CERN FESA framework, C/C++, Bash and GNU Linux, Michal identified many possible improvements in the software responsible for controlling 2500 power converters. He demonstrated a very structured and organized approach towards work, defining and prioritizing clear objectives, using modern technologies, as for example, the issue tracking and project management system (JIRA), the CERN-wide versioning control system (SVN) to track the changes of the software source code. After extensive tests in the laboratory, he released the binaries in 35 operational *front-end* computers using semi-automatic tools created by him to guarantee configuration consistency as well as performed basic tests on a new binaries.

Michal was an essential person to handle CERN high availability systems. Michal has proven his project management skills in implementing major evolutions for the power converters controls, while maintaining a fully reliable and stable service 24/7/365 to the operation teams in the CERN Controls Center. His new solutions and enhancements fixed several long-standing issues and significantly decreased the errors experienced by the operation teams.

This achievement was the result of Michal's outstanding technical skills, his in-depth knowledge and his vision of the whole system, combined with the trust he successfully developed with his partners in and outside the group.

I have also been impressed by Michal's ability to listen to people, never imposing his view but naturally convincing his peers about his proposals for changes. Michal takes initiative beyond regular tasks and makes things happen. I strongly recommend him.

Yours faithfully,

Marine Pace,  
Leader of CERN Accelerator Controls Operation.