

**IFAC Technical Committee on Human Machine Systems (TC4.5)**  
**20<sup>th</sup> IFAC World Congress, Toulouse, July 2017**  
Date and time: Monday, July 10, 2017, 11:00-12:00  
Venue: Meeting Room ‘Cumparsita’

Attendees:

T Sawaragi (Kyoto U, JP)  
F Vanderhaegen (U of Valenciennes, FR)  
J Zhang (East China U of Sci & Tech, CN)  
K Janschek (TU Dresden, DE)  
D Zuehlke (FKI GmbH, DE)  
S Hirche (TU Munich, DE)  
T Samad (U of Minnesota, USA)  
V Villani (U of Modena and Reggio Emilia, IT)  
D M Pool (TU Delft, NL)  
D Trentesaux (U of Valenciennes, FR)  
B Riera (U of Reims, FR)

**1. Review Report from Past Chair (Prof F Vanderhaegen)**

- a. Prof F. Vanderhaegen serves as the EiC of Cognition, Technology & Work (Springer). Several special issues for the journal, including one based on the extended version of the selected papers of IFAC-HMS2016 (Kyoto, Japan, Sept. 2016), are planned – details are on “CTW” webpage.
- b. Membership – We have 73 current members. The new Chair, Prof Jianhua Zhang, will invite members of CAA (Chinese Association of Automation) TC on Hybrid Intelligence and some young researchers (e.g. who received his/her PhD degree in the past five years) in the field of human-machine systems to become TC 4.5 regular/junior members.
- c. Tallinn, Estonia was determined to host the next IFAC Sym. HMS in 2019.
- d. CC4 Chair, Prof Klaus Janschek, asked us to strengthen the collaboration with other CCs, for instance, CC4, CC5 or CC9. This was circulated and resulted in several suggestions to co-sponsor future IFAC symposia, conferences, or workshops.

**2. Report on 2016 IFAC Symposium on Human Machine Systems**

A brief report was given by Profs F Vanderhaegen and T Sawaragi. They indicated that the organization of the Symposium was a great success and in particular the Japanese industry in the fields of control and human-machine systems participated actively in the Symposium.

**3. Report on TC4.5 Webpage**

Prof F Vanderhaegen will update TC4.5 homepage, including a complete list of current members.

**4. CTW (Springer) Report**

- a. Journal impact factor is: 1.105

- b. The journal will invite new AEs from the TC.5 members, and we need to consider to apply for making it an IFAC-affiliated journal, in order to build up the visibility and recognition of human-machine systems within the IFAC community.
- c. All AEs will be invited to join TC4.5.
- d. We are interested in review papers in emerging topics or on recent progress in human-machine systems field.

## **5. TC4.5 Scope**

TC4.5 scope encompasses many of TC4.5 areas of interest. However, it was identified some years ago, and now it is time for further revision and possible expansion.

## **6. Reorganization of TC4.5 Chair Team**

Prof F Vanderhaegen's 2<sup>nd</sup> three-year term as TC4.5 Chair came to an end after this World Congress 2017 and a new Chair, Prof Jianhua Zhang, has been elected after consultation with some TC active members. This was discussed and voted on the TC meeting during the IFAC HMS2016, unanimously approved by the current TC members, and has been approved by the IFAC TB Chair.

Tamsyn Edwards, Sven Nomm, Kenichi Tanaka, T. Sawaragi, and F. Vanderhaegen will serve as the TC Co-Chairs responsible for social media, education, publication and industry-academia cooperation. The Chair acknowledged gratefully the previous Chair Team's significant contributions to our TC.

## **7. Other Businesses**

Prof Klaus Janschek, the CC4 current Chair, discussed a few procedural issues, proposed to strengthen cooperation with CC7 and CC3 and to set up a new TC on sensing, perception and information processing in replacement of the closed TC on devices and components. He also introduced the proposal for strengthening the robotic control research within CC4 and the plan to organize relevant open invited tracks during the next IFAC World Congress in 2020 in Berlin. In addition, other attendees also offered insightful suggestions regarding future events and development strategy of this TC.

## **8. Next TC Meeting**

Next meeting will be held during the IFAC HMS 2019 in Tallinn, Estonia.