

# 4<sup>th</sup> GI/ACM Workshop on Standardization of I4.0 Automation and Control Systems

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## Preface

This volume contains the papers of the GI Jahrestagung 2019 presented at the 4th GI/ACM Workshop on Standardization of Industry 4.0 Automation and Control Systems (according to IEC 62443 IACS) held on September 24, 2019 at the 'GI Jahrestagung' Kassel.

The basic industrial multipart standard IEC 62443 aimed at by the GI/ACM workshop series interconnects and supports communication with several standardization organizations aiming at methods and techniques in the realms of: CRITIS, ETSI TC Cyber, IEC TC65 Smart Factoring, ISO JTC1 SC27/WG4 IT Security, Artificial Intelligence (SC42) and Industrial IoT (SC41).

From 2013 and before the multipart standard IEC 62443 is continuously growing. Almost every 2 years a new part is published. The roadmap towards a complete view on I4.0 Systems contains a system view of four groups of standards, i.e. General Concepts (1), Policies and Procedures (2), System Aspects (3), Component Aspects (4).

Recently in 2018 a 5<sup>th</sup> group of 'Industry Profiles' has been defined and started. Industry Profiles are based on available parts of IEC 62443-2.4 for solutions suppliers and IEC 62443-4.1 for product developers.

This is the 4<sup>th</sup> WS in series joined with 'GI Jahrestagung' this year 2019 in Kassel Germany. The former I4.0 standardization workshops joined with GI Jahrestagungen happened in Berlin(3<sup>rd</sup>), Chemnitz (2<sup>nd</sup>) and Klagenfurt (1<sup>st</sup>).

The PC and its Chairing Board (CB) of the workshop acknowledge the manifold support from the associations of 'German Chapter ACM' and 'Gesellschaft für Informatik (GI)' of the D-A-CH countries.

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Furthermore the WS PC/CB appreciated the joining of the ‚Standardization Council I4.0‘ and the strategic ‚Plattform I4.0‘ to the WS supporters whereby the latter two organizations comprise other standardization associations working towards industrial standards, e.g. DIN, DKE/VDE and more.

Additionally the European Cyber Organization (ECISO) supports the workshop’s main issue of IEC 62443 IACS. ECISO is structured into 6 working groups comprising but not limited to Standardization of Supply Chain Management (1), International Collaborations (2), Sectorial Demanding I4.0 (3), Coordination with Regions (4) and Awareness of cyber Ranges (5).

The workshop’s PC/CB appreciate the continuous support in preparing the workshop, printing posters, organizing decision-making meetings etc. gained from FhG-FOKUS Berlin!

The use and deployment of EasyChair enabled us to fulfill all the constraints and conditions on this diverging communications EU-wide and quite heterogeneously including industrial, scientific, governmental start-up SMEs and many other participants to be integrated on one virtual round table of EasyChair.

**July 04, 2019, Berlin, the Co-Chairs**

**Jan-Bernhard de Meer**

**Karl Waedt**

**Axel Rennoch**

**Hans-Joachim Hof**

### **The 4<sup>th</sup> GI/ACM Workshop Programme Committee**

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