Invited Session on "Supply Chain Resilience and Viability"

10th IFAC Conference on Manufacturing Modelling, Management and Control

<u>Track Chairs</u>:

- Prof. Dr. Daria Battini, University of Padova, ITALY
- Prof. Dr. Alexandre Dolgui, IMT Atlantique, FRANCE
- Prof. Dr. Dmitry Ivanov, Berlin School of Economics and Law, GERMANY
- Eng. Riccardo Aldrighetti, University of Padova, ITALY

Abstract:

Enterprises worldwide are facing significant challenges from growing competition and the destabilizing effects of climate, disease, and other external perils. Supply chain management (SCM) has been recognized as a critical capability to navigate such risks successfully with the aim of design resilient and reliable Supply chains (SCs) marked by a high capability of withstanding and recovering rapidly from disruptive event. In last decades, researchers have addressed various facets of supply chain risk management like risk identification, assessment, mitigation, and monitoring. However, the recent example of coronavirus COVID-19 outbreak demonstrates the necessity to extend the angles of SC resilience and risk management towards new paradigms such as SC viability (the system ability to meet the demands of surviving in a changing environment).

This Invited Session aims to investigate the development of innovative approach in the field of supply chain risk management from a multi-disciplinary operational perspective. The aim of this session is to attract highquality papers detailing the most recent developments in the field of tackling uncertainties, building resilience, and developing adaptable systems in supply chains. An important area of interest is the development and integration of new KPIs to be considered for future supply value chain designs based on resilience, responsiveness, and re-configurability apart from the more traditional metrics such as cost, quality and delivery, and new performance measures

Track topics:

The track chairs invite scientists, engineers and decision makers from government, industry, and academia to contribute theoretical and applied research papers in areas including but not limited to the following topics:

Supply chain design with resilience and business continuity considerations, Trade-off "resilience vs. efficiency" in redundancy/robustness planning, Creating flexibility and adaptability in the supply chain, Role of Operational Research in the future epidemics/ pandemics, Development of KPIs to be considered for future supply value chain designs (e.g. resilience, responsiveness, reconfigurability), Quantitative analysis techniques for supply chain control, Analytics, Optimization and Simulation, Game theory, Empirical Research, Control theory.

Submission

For author guidelines, please refer to <u>www.ifac-control.org</u>. All papers must be submitted electronically using <u>https://ifac.papercept.net/</u> and must follow the two-column format in accordance with the IFAC manuscript style. Please use the official IFAC instructions and template to prepare your contribution as full-length draft paper. Submission details are available on the symposium website. All submissions must be written in English. All papers that conform to submission guidelines will be peer-reviewed by IPC members. The corresponding author submits the paper online (pdf format) as **an open invited session paper**. Submission as an invited paper requires the **invited session code**: *XXXX*. Several international journals are associated with the conference for publication of special issues.

Important dates:

December XX, 2020	Draft paper submission deadline
January XX, 2021	Notification of acceptance
February XX, 2021	Camera-ready final manuscripts submission