



18th IFAC Symposium

Information Control Problems in Manufacturing (INCOM 2024)

Vienna, Austria, 28-30 August 2024

<https://www.incom2024.org/>

Special Session Proposal

### **How Short Supply Chains or Reasonable Supply Chains address Sustainability?**

#### **Proposed by:**

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**Code:** **TBD**

#### **Short presentation:**

Short Supply Chains are defined in the EU regulation as “a supply chain involving a limited number of economic operators committed to cooperation, local economic development, and close geographical and social relations between producers, processors, and consumers”. Short Supply Chains incorporate aspects of geographic, spatial, economic, organizational, institutional, and social proximity. Proximity leads to changes in the way markets distribute value as opposed to the logic of industrial production. It might support the development of the relationship between producers and consumers and the design of new forms of social association and market governance. Furthermore, the shortening of the chain led to the reduction or the absence of intermediaries and so, the possibility for the producer to be a price-maker, recovering part of the value dispersed along the conventional chain. This shortening of the chain, as well as sustainable operations can also contribute to climate change mitigation and net-zero emissions. In this context, short supply chain can be considered more economically, socially, and environmentally sustainable.

At the same time, a new trend is emerging around slow flows, or slow logistics. Indeed, supply chains have become globalized, spanning the globe, and penetrating deep into distant regions and territories, with multiple tiers of suppliers dramatically reducing costs while meeting the challenge of dramatically improving lead times. Assumptions have been made about inexhaustible supplies of raw materials, abundant and very cheap energy - most of it, fossil fuel - and the non-integration of environmental impacts into costs. Isn't it time for a paradigm shift, to question our historical assumptions? Our supply chains are overstretched, and the slightest grain of sand puts them at risk: shouldn't we design more sober flows, propose reasonable deliveries, question customer wishes such as short delivery time, review certain models, such as the just in time model, in the light of the 3 pillars of sustainable development, to deal with "reasonable supply chains"?

This invited session is aimed at collecting research contributions addressing the ways short or sober supply chains deal with the issue of sustainability according to the Triple Bottom Line paradigm. Even if main works about short supply chains concern the food sector, other sectors like manufacturing or logistics can also be considered. Both theoretical and empirical papers, case study and applied research are welcomed.

Consequently, this session is intended to include papers in the following topics (but not limited to):

- Short / reasonable supply chain organization structure,
- Frameworks and indicators for measuring the sustainability in short / reasonable supply chains,
- Effect of the shortening of the chain on the global performances,
- Relationship with innovation technology trend (industry 5.0),
- Supply chain design and management for sustainability and net-zero emissions,
- Supply chain processes in urban environment,
- Slow flows, slow logistics,
- Sustainable performance of "in no time" delivery models.

**Keywords:** Short supply chain, reasonable supply chain, sustainability, net-zero emissions, slow flows, slow logistics, industry 5.0

**Important dates:**

- Full paper submission: 31 January 2024
- Notification of acceptance: 15 March 2024
- Final, camera-ready paper submission: 15 April 2024
- Conference days: 28-30 August 2024, Vienna, Austria