RISK MANAGEMENT OF DISRUPTIVE EVENTS IN SUPPLY CHAINS
Disruptive events and their effects are not a new phenomenon that needs to be considered in the context of risk management. There have always been unforeseeable events with significant impacts and little to no warning time in business practice. However, the development of worldwide value-added structures to move toward global and networked supply chains with closely integrated logistics and value-added processes, has greatly increased the vulnerability of individual supply chains. Longer transport distances, globally distributed supplier and customer structures and reliance on the functioning of tightly synchronised networks are susceptible to massive impact in the event of an unplanned and perhaps even unforeseeable disruption. Increasing political and social uncertainties and the growing number of extreme environmental and weather events due to climate change continue to highlight the importance of disruption risk management [1].

In many cases, current technologies to support the management of disruptive events, such as artificial intelligence, blockchain or simulation, are already available and integrated in software solutions. However, many companies have still not begun adapting processes and structures or ensuring that employees have the organisational and technological skills to be able to realise the potential that technology can make possible. On the other hand certain individual companies are already preparing the entire supply chain for disruptive shocks in the best possible way through modern IT, customised internal organisation and collaboration with value creation partners.

In preparing this white paper, technical experts and decision-makers from industry and trade together with external knowledge carriers were involved in order to obtain the most comprehensive and cross-sector view possible on the topic of disruptive risks. Based on these interviews, four areas of activity were identified - risk awareness, transparency, flexibility and cooperation - for companies and supply chains, in which current shortfalls in the instruments, methods and measures used were the focus. The need to support employees, processes and functionalities have been identified in both the preparatory proactive and reactive measures and solutions. With regard to these areas of activity, technology-based approaches and solutions are presented, which are intended to provide support while getting to grips with the existing challenges.