## **Guest Editorial**

Dear reader,

It is my pleasure to introduce this special section of the Statistical Journal of the IAOS. Here you can read extended versions of papers that were presented at the Annual Conference of the Directors-General of National Statistical Institutes in the European Statistical System in October 2018. The conference took place in Bucharest, Romania, and was dedicated to "The European path towards Trusted Smart Statistics".

Trusted Smart Statistics is a major development that Eurostat recently launched with its partners in the European Statistical System. It refers to the evolution of official statistics to embrace the opportunities provided by new technologies (such as Artificial Intelligence, Machine Learning and Secure Private Computing) and new data sources originating from the digitalisation of society and the economy. New data sources will complement the traditional ones, such as administrative data and surveys. They will offer significant gains for all quality dimensions (including relevance, timeliness, accuracy), thereby complementing and augmenting existing European statistical products and services.

I would like to thank my colleagues Martina Hahn, Fabio Ricciato and Albrecht Wirthmann, who prepared

this section. The first two papers (Vichi and Hand; Ricciato et al.) discuss general aspects of Trusted Smart Statistics and provide a detailed overview of their multiple facets. The following three papers (Ruppert; Kubo et al., Loison and Kuonen) examine more specific themes, namely citizen data, privacy by design and production models. The other four papers report on the experiences and lessons learned from pilot projects and research activities based on the processing of nontraditional data sources. Two of them refer to work carried out by National Statistical Institutes (Barcaroli and Scannapieco; Oancea and Necula), one discusses work by academic researchers (Delopoulos) and the other looks at work from European institutions (Descy et al.).

Together, these papers provide a comprehensive overview of the current state of Trusted Smart Statistics, what they mean for us and how we can develop them in the future.

I hope you enjoy reading this issue.

Mariana Kotzeva Director General