

Towards a Reference Architecture for Trusted Smart Statistics

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Abstract. In this contribution we outline the concept of *Trusted Smart Statistics* as the natural evolution of Official Statistics in the new *datafied* world, where traditional data sources (survey and administrative data) represent a valuable but small portion of the global data stock, much thereof being held in the private sector. In order to move towards practical implementation of this vision a *Reference Architecture for Trusted Smart Statistics* is required, i.e., a coherent system of technical, organisational and legal means combined to provide an articulated set of trust guarantees to all involved players. In this paper we take a first step in this direction by proposing selected design principles and system components that, as of the current state of play, we believe will be part of the final design. The goal of this contribution is not to propose a ready-made fully-fledged solution, but rather build awareness about the necessary elements (technological and not) and fuel the discussion with the involved stakeholders.