For years, industry experts have confidently agreed that non-interoperability impedes the sharing of data and the sharing of computing resources, causing companies to spend much more than necessary on data, software, and hardware, thus thwarting collaboration opportunities at a time when alliances are most necessary. The quest of the Holy Grail of Interoperability of software and applications for enterprises imposed itself as a recurrent topic among researchers and practitioners alike. Yet in recent years, as the online economy and society has developed and gradually transformed the way human activities are organised and undertaken in the different economic sectors, the business context for Enterprise Interoperability has undergone a major face-lift. During at least one decade, investments in Enterprise Interoperability, partially supported by Community research programmes, particularly under the 5th and the 6th Framework Programmes, were driven by a focus on an increase in productivity and efficiency and a re-definition of business processes within a context of almost static value chains. Such an enterprise-centric approach, though legitimate and arguably successful, failed to recognise the need for enterprises to focus on value innovation and producing more of not the same.

In order to support the bottom-up movement pushed by an increasing number of “prophets” who have been seeing Enterprise Interoperability geared towards leveraging creativity, collaboration and agility in more dynamic value networks, the European Commission has established a cluster on Enterprise Interoperability – which recently took the name of “Future Internet based Enterprise Systems”. A cluster is usually composed of a core group of EU-funded research projects which may eventually be joined by other European (Eureka) and/or EU national initiatives that receive public financing. Since 2005, besides the outstanding work of its individual projects and some key achievements, the cluster has pushed back enormously the frontiers of concentration and collaboration by producing three milestone documents: An Enterprise Interoperability Research Roadmap, first published in 2006 and regularly updated with version 6 in preparation, a Value Proposition for Enterprise Interoperability (January 2008), and a Position Paper (September 2009) that smoothly develops short-term goals for the enterprise of tomorrow, acknowledging in particular the dismal economic outlook that casts a damper on many companies, in support of a long-term, challenging goal that involves constant commitment, grand vision and sound strategy.

It is noteworthy that part of this vision concerns a profound revisiting of what interoperability is all about. Building upon the fact that during the last decade Enterprise Interoperability was widely investigated by research communities, people involved in the cluster began to think – and say – that time was ripe to establish the foundations for a Science Base for Enterprise Interoperability. For example, Systems Theory is one fundamental theory used to model an Enterprise, thus this theory should be used in particular to model Enterprise Interoperability. As a result, a new science is perhaps in the developmental stage, embracing scientific concepts, theories and principles derived from established
and emerging theories, together with associated methods, techniques and practices for solving general Enterprise Interoperability problems.

In these times of unprecedented challenges for Science, Technology and Business, the book on “Interoperability in Digital Public Services and Administration: Bridging E-Government and E-Business” is probably the most comprehensive single volume document published in the field of Interoperability. This title covers more than 20 scientific and technological topics, and addresses all the main issues – Guidelines, Frameworks and Standards; Infrastructures and Services; Modelling and Science. It is an amazing record of a talented and dedicated community of researchers struggling to respond intelligently and forward-lookingly to new challenges to Interoperability.

This book is the output of many people, spread around the world and across time, working hard to shape the theoretical, practical and policy-related foundations of interoperability. It crystallises the art of a vibrant society of disparate minds, all working passionately to make something new and important happen. It aims at bridging E-Government and E-Business – and it does indeed. But it also bridges nationalities, generations, languages, cultures and even oceans to build, as would say foresight advisor James P. Cramer, a “community of creativity”.

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Gérald Santucci has been working in the Information Society and Media Directorate-General of the European Commission since February 1986. In March 2007, he was appointed Head of the Unit Networked Enterprise & Radio Frequency Identification (RFID). The unit’s portfolio includes some 50 R&D projects, grouped around two clusters, which address the development of ICT-based systems supporting the Future Internet Networked Enterprise and the shift from contactless technologies towards the Internet of Things. Over the years, Gérald has gained extensive experience in the activities of the Directorate-General through his involvement in research management, including heading the Unit “Applications relating to Administrations” (i.e. eGovernment) 1999-2002, the Unit “Trust and Security” 2003, and “ICT for Enterprise Networking” 2004-2006. Gérald holds a Master’s degree from the Institute for Political Studies in Paris, and a PhD in Microeconomics from the University of Paris 12 Val-de-Marne.