

Foreword

Research and innovation are today at the core of European policies and the Europe 2020 strategy for smart, sustainable and inclusive growth. Since 1951 with the European Coal and Steel Community and the 1957 Euratom Treaty, a long journey has taken place in the world of research and innovation. The initial thoughts of Commissioner Ralf Dahrendorf on the European Research Area in the 1970s are becoming a reality. The launch of the initial Framework Programmes (FP) in the 1980s is now giving birth to a huge programme called 'Horizon 2020' with an expected annual budget of €10 billion per year.

Some research and innovation objectives remain the same over time like the production of new knowledge and to push the frontiers of the unknown. But the actors, the institutions and the way research and innovation are performed have radically changed over these last decades, particularly considering that services represent today more than 70 per cent of the value added and employment in Europe. In addition, non-technological aspects of the innovation process are increasingly important for bringing more innovative products and services into the marketplace.

Research is no longer a heroic and individual intellectual adventure. The variety of disciplines, the cross-sectorial linkages, the miniaturization, the digitalization and the interface between science and society make research a very complex issue. Innovation is a lot more than the application of an invention. It covers technological, economic, social, cultural and psychological aspects. It becomes open and global. It involves a large number of public and private actors. The 'innovation ecosystem' is now part of the jargon far beyond the Schumpeterian community. Social innovation is happening around us with the examples of car sharing or bike sharing all around Europe.

The borders between the industrial sector and the service sector have been blurred with the development of generic purpose technologies, especially information and communication technologies. The weight of ad hoc and 'close to the customer' services is increasing with the green economy. The need for personalized services is exploding in a context of ageing populations. The service component plays a more important role than in the

past with a structural shift from quantity (cf. economy of scale) to quality (cf. health and environment concerns).

What are the consequences of the emerging techno-economic paradigm? What is the impact of intangible investments? How do knowledge spillovers function? How does innovation in services work? What is the weight of physical and immaterial infrastructures? How does the interaction between public and private actors take place? How are societal issues in the fields of, for example, education and mobility tackled by service innovators? These are some of the questions raised by a number of European Union research projects, including ServPPIN that focuses on collaboration between public and private actors in service innovation.

We are living a socio-ecological transition with a rapidly evolving external environment. Demographic change, economic restructuring and resource efficiency require a new way of thinking. In a tertiary economy, the replication in the production process does not play the same role as in traditional industrial times. Research and innovation must adopt multidisciplinary approaches, focus on common societal challenges and bridge the gap between industrial and service innovations. As mentioned in the European Commission Innovation Union: 'Our future standard of living depends on our ability to drive innovation in products, services, business and social processes and models.'

Public authorities have had a crucial role in promoting innovation in the last decades (cf. Internet, world wide web, GSM). The 'state' – including European Union (EU) institutions – will certainly continue to have such a role looking at the world and European societal challenges that we have to face such as the strong concentration of needs in urban areas, climate change impacts, obesity problems and migration issues. Innovation is not a purely private sector process focused on industry. It is more and more a combination of public, private and third sector efforts.

ServPPIN has been one of the best European research projects to tackle, from both a theoretical and empirical perspective, the question of public–private sector innovation networks in service sectors. ServPPIN has greatly improved the understanding of the technological and non-technological innovation that makes these public–private networks successful. Cooperative models – benefiting from cross-fertilization between public and private services – have a bright future. This is probably a key policy recommendation coming from the ServPPIN Project.

Research and innovation can help turn the EU into a 'hub' for clustering services and industry in the global economy. In this hub, services and industry, public and private sectors would mutually enrich each other using both individual initiatives and collective measures. But we need to stimulate our markets, adapt our regulations and rapidly implement

pan-European standards. The potential is high in Europe with our strong eco-industries, our socially driven health care system and our globally respected social model.

Domenico Rossetti di Valdalbero
DG Research and Innovation, European Commission