

**Call for Papers:**  
**TOWARDS MODE 3 SMART SPECIALISATION STRATEGIES**  
**EMBEDDED IN QUADRUPLE INNOVATION HELIXES**  
**AS SUSTAINABLE, INTELLIGENT AND INCLUSIVE GROWTH DRIVERS**

**Springer Journal of the Knowledge Economy**  
<http://www.springer.com/economics/policy/journal/13132>

**Special issue: RIS3 FOR GROWTH**

**JANUARY 15, 2013**

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The Smart Specialisation approach (RIS3) promoted by the European Commission was first outlined by the Expert Group "Knowledge for Growth" in 2008. The main rationale was a need to revitalize regional policies promoting the formation of regional systems of innovation, including triple and quadruple helix<sup>1</sup>. The point of departure in the Knowledge for Growth Expert Group was innovation system research and theory applied on regional level systems of innovation (RIS). Based on the RIS tradition, RIS3 calls for the design and implementation of research and innovation strategies and has been placed at the core of the new European cohesion policy as main driver for the achievement of the Europe 2020 strategy objectives from a regional perspective. In order to facilitate the participation of small European nation states, the acronym RIS is later extended to refer to not just regional systems of innovation, but also research and innovation systems.

The Europe 2020 strategy is a comprehensive economic policy agenda for the EU and was launched June 2010. It has three priorities: smart, sustainable and inclusive growth. To assist regions in developing RIS3 strategies, the European Commission launched the S3 Platform in 2011. Regional governments are invited to participate in the Platform. To support regions, the S3 Platform has developed a "RIS3 Guide"<sup>2</sup> outlining a set of general principles for how S3 plans should be developed at the regional level. Among other activities, the Platform is also organizing

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<sup>1</sup> Elias G. Carayannis & David F. J. Campbell 2009

<sup>2</sup> EUROPEAN COMMISSION May 2012: Guide to Research and Innovation Strategies for Smart Specialisation (RIS 3)

conferences where regions are invited to present their strategies, and be “peer reviewed” by policymakers and specialist planners in other European regions. Through the application of these horizontal forms of multi-level governance, the Platform is helping regions to transform their Triple and Quadruple Helix (Carayannis and Campbell, 2009; 2012).

Policy experiments like S3 are likely to illuminate core processes in the knowledge economy, and provide empirical material which opens up for multi-disciplinary research in several directions. This call address

1. empirically based research on the on-going S3 experiment
2. theoretically or conceptually based analysis and discussion with relevance for S3 as well as
3. empirical studies of Quadruple Helix processes or strategies which may be seen as relevant to the future development of S3.

In particular, we are interested in the following S3-related topics:

- Which tool and analyses, quantitative and qualitative, could be used to provide the evidence needed for priority choices?
- How has the process of priority choices worked so far in regions/countries? Which are the main novelties of the RIS3 approach in this respect?
- Which are the mechanisms to have wide and effective involvement of stakeholders in priority selection?
- How can the S3 approach or similar, relevant or related approaches enable regional partnerships to take their Triple / Quadruple Helixes into Mode 3? Regional systems of innovation are characterized by lock-ins<sup>3</sup>. Moving a Quadruple Helix into Mode 3 (Carayannis and Campbell, 2009; 2012) requires sophisticated initiatives in path breaking and new path creation.
  - In this respect, the S3 Guide refers to the theory of “the process of Entrepreneurial Discovery”, outlined by Foray<sup>4</sup> Other relevant S3 tools are “peer review” and “critical friendship”. What are the experiences with these tools? Are they adequate, or should they be developed further?
  - To what extent does S3 open up for an extension of the Triple Helix into a Quadruple Helix (Q4) (Carayannis and Campbell, 2009, 2012), taking the broader societal context (including the national system) of the regional system of innovation into consideration, as well as the Quintuple Helix, taking a new look at the limitations and possibilities of the natural environment and natural resources of the region?
  - With reference to “entrepreneurial discovery”, to what extent does S3 enable the formation of new and unique regional strategies, based on re-combinations of knowledge assets embedded in the region?

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<sup>3</sup> VESA HARMAAKORPI & HELINA MELKAS Knowledge Management in Regional Innovation Networks: The Case of Lahti, Finland

<sup>4</sup> Dominique Foray 2011 Smart specialisation: from academic idea to political instrument, the surprising destiny of a concept and the difficulties involved in its implementation Paper Prepared for European Integration process in the new regional and global settings Warsaw, October 19th and 20th, 2011

- S3 is expected to set in motion a new dynamic in regional level partnerships and institutions set up to promote regional systems of innovation. According to Carayannis and Campbell (2012), the concept of open innovation diplomacy (OID)<sup>5</sup> encompasses the concept and practice of bridging distance and other divides (cultural, socioeconomic, technological, etc.) with focused and properly targeted initiatives to connect ideas and solutions with markets and investors ready to appreciate them and nurture them to their full potential. In this sense, OID qualifies as a new and novel strategy, policy-making, and governance approach in the context of the quadruple and quintuple innovation helices. A particular aspect of OID in the context of Quadruple Helix is co-existence, co-evolution, co-specialization and co-optation of different paradigms of knowledge and innovation. With reference to this topic, these questions may be raised:
  - To what extent is the S3 or other relevant, related or similar approaches enable regional actors to do open innovation diplomacy (OID)?
  - What is the role of S3 or other relevant, related or similar approaches in discovering new ways of co-evolution and co-specialization of university based scientific knowledge, following the STI mode of innovation, with industries usually applying practice-based knowledge following the DUI mode of innovation, as well as the modes of innovation and knowledge in the “creative” industries based on art and design?
  - To what extent does S3 or other relevant, related or similar approaches open up for entrepreneurial (mode 3) university strategies, where universities take responsibility for the Quadruple Helix?
- Going GloCal – transnational and higher order learning (L3) (Carayannis, 1994, 2000) and metrics, measurement, management (M3) (Carayannis and Provan, 2008) for growth? The S3 –Europe 2020 strategy is intended to enable deeper integration of regional Triple / Quadruple Helices into European and global systems of innovation. We are interested in contributions which highlights
  - Globalization of universities, industries, and regional policy institutions, i.a. all three corners of the Triple Helix, through transnational learning.
  - Impacts of transnational learning on the locally based dynamics, structure and processes inside the Triple helix. For instance, what is the role of “critical friends” and “peer review” in the development of regional S3 strategies? The significance of transnational learning on the formation of new knowledge ecosystems.
  - The nature, dynamics, role and impact of higher order learning ( in public and private sector as well as regional and sectoral contexts and the policy and practice implications for policy makers, practitioners and civil society at large.

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<sup>5</sup> Elias G. Carayannis & David F. J. Campbell 2011 Open Innovation Diplomacy and a 21st Century Fractal Research, Education and Innovation (FREIE) Ecosystem: Building on the Quadruple and Quintuple Helix Innovation Concepts and the “Mode 3” Knowledge Production System

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**FIRST DRAFT DUE DATE: DECEMBER 31, 2013**

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<http://www.springer.com/journal/13132>

Journal of the Knowledge Economy

Editor-in-Chief: Carayannis, E.G.

ISSN: 1868-7865 (print version)

ISSN: 1868-7873 (electronic version)

Journal no. 13132