

XXI International Conference on Industrial Engineering and Operations Management  
9th International Conference on Industrial Engineering and Industrial Management  
International IIE Conference 2015  
Aveiro, Portugal. July 6-8, 2015

## Public Policy Focus on R+D+i for the Demand and Opportunities of Industrial Innovation

Piñero A<sup>1</sup>, Rodríguez Monroy C<sup>2</sup>, Peláez M A<sup>3</sup>

**Abstract** The present work aims to develop a proposal for public policy focus on R+D+i for demand and opportunities for Industrial Innovation, specifically in the area of Small and Medium Industries (SMIs) since they represent a priority for development in the international context. This study summarizes documentary and applied research. The work starts from the discussions and recommendations made by different researchers and international cooperation agencies relating to public policy design for R+D+i to promote demand for product innovation in the market through purchases by State companies or the establishment of partnerships with private business for purchases, in order to encourage and stimulate the interest of SMIs in participating in the R+D+i projects. These recommendations become the basic guidelines for the design of various models of public policy approach to R+D+i.

**Keywords:** Public Policy for R+D+i; Demand for Innovation; Innovation System.

### 1 Introduction

The development of the R+D+i has become a priority for government administration designing public policy on R+D+i, to understand that innovation is the alternative to boost economic, social and sustainable development of a country. Bena-

---

<sup>1</sup>Alexander Piñero (e-mail: [alexanderpinero12@gmail.com](mailto:alexanderpinero12@gmail.com))  
Universidad Nacional Experimental de Guayana (UNEG). Puerto Ordaz, Venezuela

<sup>2</sup>Carlos Rodríguez Monroy (✉ e-mail: [crmonroy@etsii.upm.es](mailto:crmonroy@etsii.upm.es))  
Universidad Politécnica de Madrid. c/ José Gutiérrez Abascal, 2, 28006 Madrid.

<sup>3</sup>Miguel Ángel Peláez (e-mail: [mapelaez@etsii.upm.es](mailto:mapelaez@etsii.upm.es))  
Universidad Politécnica de Madrid. c/ José Gutiérrez Abascal, 2, 28006 Madrid

vente et al., (2012) consider that government policies have an important role in establishing a suitable environment for companies to improve their level and willingness to innovate. These initiatives have led to other studies such as Ben (2012), in the evolution of public policy, aimed at cooperation in the interactive R+D+i process with a focus on the Innovation System (IS).

## **2 Objectives**

This paper aims to develop a proposal for R+D+i Public Policy focus for Demand and Opportunities for Industrial Innovation, specifically in the field of SMIs, since this represents a priority area for development in the international context.

## **3 Methods**

The study presents a documentary and applied research type. The research work starts from the discussions and recommendations made by different researchers and international cooperation agencies concerning the design of R+D+i public policy to promote demand for innovation in the market. Subsequently these recommendations, theories of innovation and process innovation system become the basic guidelines for the design of various types of R+D+i public policy approaches for demand and opportunities for industrial innovation.

## **4 Results**

As results of this study different models are proposed for R+D+i public policy approaches for demand and opportunities for industrial innovation, specifically in SMIs. Each model is described and the role of the government institution in implementing the R+D+i public policy approach is analyzed.

## **5 Conclusions**

The model approach to R+D+i public policy for the demand and opportunities for industrial innovation must have internal assessment stages in the innovation processes of SMIs and the external evaluation concerning the placement of products on the market, in order to detect possible obstacles in the implementation of SMIs' plans to achieve a better capacity in their innovation goals. Without the stages of internal and external evaluation there is the risk of not being able to correct those actions which ensure the compliance with the public policy for R+D+i.

## **References**

- Ben M (2012) The evolution of science policy and innovation studies. *Research Policy*. Volume 41, Issue 7, Pages 1219-1239.
- Benavente D, Dutta S, and Wunsch-Vincent S (2012) *The Global Innovation Index 2012: Stronger Innovation Linkages for Global Growth*. Chapter 1. INSEAD and WIPO 2012. ISBN: 978-2-9522210-2-3. France.