PhD in Urban and Regional Development

(jointly activated by Università degli Studi di Torino and Politecnico di Torino)

Research Title: The downstream space technologies within the climate change/ environment sector: the technology transfer/spin off process added value

Funded by	Politecnico di Torino (Joint Research Projects with Top Universities)

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Context of the research activity	The partner University of this research project is Instituto Tecnológico y de Estudios Superiores de Monterrey – ITESM inMexico. Through the European Space Strategy (published on March 2017) has been stressed the need to maximise the potential integration of Space into the everyday life for the benefit of the European society and economy by: increasing the use of space technologies and applications to support public policies and provide effective solutions to the complex societal challenges; fostering a globally competitive European space sector, by supporting research, innovation, entrepreneurship for growth and jobs across all Member States, and seizing larger shares of global markets; ensuring European autonomy in accessing and using Space in a safe and secure environment, in particular through the consolidation and protection of its space related infrastructures, including against space debris, cyber security threats and space weather risks. Those benefits should came supporting a better uptake of space data, in order to seize these opportunities and benefits, including in support of EU and national policies. To facilitate those European priorities, the European Commission and

	other EU funded organizations made available on a free open and full basis space data and information (eg Copernicus/GALIELO) to the European stakeholders aiming at exploiting the added value of integration of EO observation and other space technologies across different market segments through the development of applications, and encourage their insertion into the market.

Objectives	The JRP will analyze the needs of space and non-space users in Mexico to develop new applications and/or identifying suitable space technologies to meet these needs pushing also through a technology transfer process. For such applications and developments to succeed in the market, the product needs indeed to be shaped according to users' needs and their value to users must be openly demonstrated to the wider user community. This needs to be achieved in an environment integrated at the level of the user, in order for users to accept the innovative potential which the product promises. Furthermore, the JRP will identify possible new technologies and applications evolved and appeared from the integration between the GNSS, GIS and wireless communications. Furthermore, the JRP will: - understand how to facilitate the dialogue between users and service providers (including technical assistance) in order to maximise technical, societal and environmental benefits, and by industrial sectors (eg downstream services) - facilitate the dialogue between the main political actors of the Third Country selected and the main actors in EU (eg European Commission, ESA, EUMETSAT).

Skills and competencies for the development of the activity	The Phd candidate should have the following skills/ability/knowledge: - Very good knowledge of Spanish; - Previous experience in cooperating with high level S&T stakeholders in Mexico linked to the theme of this proposal (such us Mexican Space Agency and Conacyt); - Experience in managing international projects (especially those who involved Latin America countries); - Deep knowledge of the least one of these European funding programme: Horizon 2020, Copernicus, COSME, LIFE; - The ability to communicate with the public (oral skills); - Flexible to travel for a period of 18 months to Mexico.