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# From Education to Research: The CITTA R&D Unit as a SPTA spin-off

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### **Abstract**

This paper provides a brief account of the creation and evolution of the CITTA R&D Unit, which, in the early 2000s, emerged from the SPTA, the Planning Division of FEUP's Civil Engineering Department (DEC). I describe the centre's founding and the favourable internal and external conditions which shaped its composition, structure, and scientific scope. I then detail CITTA's consequent development. This was influenced by the pluriannual FCT evaluation in 2008 and the integration of researchers from the University of Coimbra a few years later, which led to a comprehensive revision of CITTA's internal regulations. Finally, I address the centre's consolidation phase, emphasising the role and importance of the last two pluriannual FCT evaluations, CITTA's publication performance relative to similar centres in Europe, and its strategic plan, which was conceived around the low-carbon cities paradigm.

**Author Keywords:** Research Centre, Research Evaluation, Research Institutions, Research Policy

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### 1. Introduction

The 50th anniversary celebration of FEUP's Environment and Planning Division (referred to as the SPTA, the Portuguese initialism for Secção de Planeamento do Território e Ambiente) gives us the perfect opportunity to address the foundation of one of its most prominent spin-offs, the Research Centre for Territory, Transportation and the Environment, known as CITTA (the Portuguese acronym for Centro de Investigação do Território, Transportes e Ambiente, in Portuguese). The primary objective of this paper is detailing the rationale for this R&D centre, which emerged as part of the SPTA's main activities, and its evolution over the past two decades. I will focus on how this institution was shaped in order to encourage research to thrive. Although CITTA's research is the main topic of this paper, this is not a research paper. It is a personal account written by an engaged participant observer.

## 2. Inception

The turn of the 21st century was a promising period for research policy development in Portugal and, as shown later, at FEUP. The then Portuguese Minister for Science and Technology, Mariano Gago, had an ambitious vision to transform the national higher education system (HES), the development of which had stagnated when compared to other more competitive systems in Europe and North America.

The Portuguese HES had been continuously expanding since the mid 1970s to meet demand, which was increasing each year thanks to the country's growing economy, since the mid 1980s especially, and the country's accession to the EEC (now EU). However, from the Minister's perspective, and that of the most progressive academic sectors, the fundamental challenge facing the Portuguese HES was not quantitative, but qualitative, and primarily the quality of the research taking place. For Mariano Gago, Portuguese universities (both public and private) were more concerned with attracting more students each year than with their fundamental role of delivering knowledge and highly specialised services to society. They were offering an increasing variety of professional and non-professional graduate and postgraduate programmes, some of which were better equipped than others. Therefore, in his opinion, research had to become a national priority. This would transform the Portuguese HES and contribute to the modernization of the national economy, which was still very dependent on low-tech sectors (see Gago, 1990).

As one could imagine, this novel discourse was not well accepted in many academic circles, particularly in the most conservative ones that are often associated with Portugal's oldest and most traditional universities: Coimbra, Porto, and Lisbon. Fortunately, under the leadership of Marques dos Santos and accelerated by the move to a brand-new Campus in 2000, a quiet but profound institutional reform that was very much in line with the Minister's vision was already under way at FEUP. The old Faculty building, despite its architectural dignity and prime citycentre location, had become too limited for the faculty's activities and development opportunities.

At this time, the Department of Civil Engineering had a single research centre, the Centro de Estudos de Engenharia Civil (CEDEC), which housed all its staff and covered diverse research fields such as structures, building construction, transport, spatial planning, hydraulics, construction materials and geotechnics. In the periodic (5-year) FCT evaluation at the turn of the century, the evaluation panel recommended subdividing this large research unit into three or four smaller, more scientifically coherent units.

Given all these factors, the timing was right to advance with the creation of a new spatial and environmental planning R&D unit. Throughout the 1970s and 1980s, the SPTA was an INIC (National Institute for Scientific Research, which is now FCT, or the Foundation for Science and Technology) centre. This meant the SPTA could count on additional funds to develop its library and conduct some individual research programs which resulted in the publication of a series of internal working papers. In the 1990s, the SPTA, along with the Faculty of Architecture's Urbanism group, put together the Master's in Spatial Planning and Urban Design<sup>1</sup>, which is still running and is consensually considered a successful programme. In other words, many valuable research activities were being carried out by the SPTA at this time.

However, the conceptualization of a truly independent officially FCT-recognised research unit with its own strategy and budget, was a far more ambitious project. Unsurprisingly, the idea was passionately discussed among senior staff members, who initially felt attached to the

<sup>&</sup>lt;sup>1</sup> The Master's in Environmental Planning and Urban Design was founded in 1993 by Profs. Nuno Portas and Fernandes de Sá from the Faculty of Architecture, and Paulo Pinho and Isabel Breda-Vazquez from the Faculty of Engineering.

Planning Division. Before long however, they realised that the initiative would benefit from the inclusion of colleagues from the Transport Infrastructures Division.

The idea was given a catchy name, CITTA, and rapidly gained wider support within the SPTA and the Transport Division, and also at the Departmental and Faculty level. In January 2002, a letter was sent to FCT asking for the pre-registration of a new R&D centre, and the FCT's provisional approval was received soon after. This started the organisational and bureaucratic procedures required to make officially launching the centre possible. The first requirement was designing, drafting and submitting the centre's internal regulations (CITTA, 2002), such as its structure and organisation, the configuration of its different research groups, its management system, and the roles and compositions of its Scientific Council and External Advisory Board. By early 2003, the FCT had officially approved CITTA as a new R&D centre, meaning that it was able to tender a bid for that year's national R&D Units' pluriannual financial programme.

### 3. Development

The first years of the centre were not easy. By the 2003 FCT evaluation of all Portuguese R&D centres, we had managed to put together five small research groups<sup>2</sup> and a common research strategy exploring the emerging topics of urban sustainability and energy-efficient transport infrastructures (CITTA, 2003). The evaluation considered CITTA to be Good, right in the middle of the FCT five-grade scale. This mark was good enough to mean that modest financial support was received over the following five years and, more importantly, our pioneering initiative to create an independent Planning and Transportation R&D centre, away from the dominant scientific disciplines of Engineering, Architecture or Geography, was recognised for the first time.

Given the small size of the centre at this time, one of our first priorities was to create the conditions necessary to add to the number of members. As increasing the number of academic staff was virtually impossible due to strict university rules and financial constraints, the only way to increase the centre's membership was by attracting the best possible PhD students with the hope that they could then be integrated into the centre's research teams as new doctorates three or four years later. The implementation of this strategy enabled the steady and sustainable growth of the centre in the medium to long term, but it was unable to produce the short-term practical results that were needed.

In May 2008, CITTA's first annual conference took place (see Pinho & Oliveira, 2009). To our knowledge, this was the first international conference organised by a Portuguese R&D centre in Portugal that was exclusively dedicated to planning research. The conference was a clear success. Thanks to the presence and active participation of all the eminent members of the centre's External Advisory Board<sup>3</sup>, the conference attracted the most senior and respected

<sup>&</sup>lt;sup>2</sup> RG1 on environmental assessment, coordinated by Paulo Pinho; RG2 on urban policies, coordinated by Isabel Vazquez; RG3 on transport management, coordinated by Álvaro Costa; RG4 on traffic analysis, coordinated by A Pires da Costa; RG5 on Transport infrastructures, coordinated by A Sousa Melo.

<sup>&</sup>lt;sup>3</sup> Professors: Patsy Healey (UK), Klaus Kunzmann (DE), Kenneth Button (US), Jean-Paul Carrière (FR), David Perry (US). At present the External Advisory Board includes the following Professors: Cynthia Barnhart (US), Kenneth Button (US), Javier Gutiérrez Puebla (ES), Luca Bertolini (NL), Luis Valente de Oliveira (PT).

researchers in the field from other Portuguese universities and research institutes. CITTA, as an emerging research centre, was starting to gain national and international recognition.

Later that year, CITTA was subject to its second pluriannual FCT evaluation (CITTA, 2008). Unfortunately, two senior coordinating members from the Transport Infrastructures Division (SVC) had left in the previous few months; one had retired<sup>4</sup>, and the other<sup>5</sup> had taken up a management position in the recently created Metropolitan Transport Authority. This meant CITTA was left with only three groups<sup>6</sup>, and fewer than a dozen senior researchers. The areas most affected were in the transport engineering field, which was the dominant area of specialisation among the evaluation panel's members.

The final result was far worse than we could ever have expected. CITTA was awarded a grade of Fair, which was enough to lose the FCT credit and, as a result, the possibility of applying to any of the Portuguese research funding programmes. We had been kicked out of the national R&D network, which was disastrous. The panel's final report stated:

- "(...) The total number of staff associated with the unit is relatively small (six) and there is clear evidence of the work of the unit being spread too thinly across too many topics.
- (...) It is right to observe, however, that the 2007 publications are indicative of an acceleration in publication in journals of international standing.
- (...) The level of internationalisation achieved in terms of publications and research projects is acceptable. Similarly, across the unit, there are adequate levels of conference organisation and obtaining of project funding.
- (...) Articulation of strategy was weak and, as above, a small unit is split into too many groups trying to work on too many topics. Research focus appeared to be determined by the (not inconsiderable) energies of some key individual staff, rather than as a result of a considered decision. As a result, there is little hope of establishing the critical mass to develop a profile of international excellence."

### From the Evaluation Panel's General Comments on CITTA (CIVE-Norte-Porto-699)

These results were contested with the full support and active participation of our External Advisory Board but, in the end, the FCT's classification was not changed. The message was clear - the national research policies were designed to encourage the creation of large research units in dominant research fields, so a small research centre like CITTA in a marginal research field like urban planning and transport policy was not supposed to be part of the national network of R&D centres.

This result could have dissuaded us. However, we had invested too much, and the fact that a Civil Engineering evaluation panel was not able to see our commitment, the quality of our research work, and the virtues of our project would not stop us. This project, as we later wrote on the centre's website, was the foundation of an innovative, creative, dynamic, and productive European research centre, developing inter and multidisciplinary research, policy,

<sup>&</sup>lt;sup>4</sup> Prof. Arnaldo Sousa Melo

<sup>&</sup>lt;sup>5</sup> Prof. Américo Pires da Costa

<sup>&</sup>lt;sup>6</sup> RG1 on planning and environmental assessment, coordinated by Paulo Pinho; RG2 on urban planning and housing, coordinated by Isabel Vazquez; RG3 on transport planning and logistics, coordinated by Álvaro Costa.

and design oriented in the complementary fields of Spatial Planning, Environmental Policy, and Transport Planning and Engineering.

In the aftermath of these disturbing evaluation results, one thing was clear in our minds. To pursue the CITTA project we had to make changes to our development policy. This meant looking for external partners and applying to EU research funding programmes, as they were the only avenues available to us. Soon though, our big problem turned into a big opportunity. By this point, we had already built good relationships with a number of colleagues and researchers in other European research centres, and we needed to embark on common research projects with them, joining our expertise and experience with theirs. Our participation in the SUME (Sustainable Urban Metabolism for Europe) project<sup>7</sup>, funded by the 7th EU Framework Programme, is illustrative of this policy change. With a total budget of over €3 million and coordinated by our Austrian colleagues from OIR − Vienna, CITTA was the second partner in the consortium, receiving almost €500,000. At the time, it was one of the best funded R&D projects in the Porto Faculty of Engineering, and a total surprise to some of our colleagues because it was being carried out by an R&D Unit that had been declassified by the FCT.

The returns of this policy change, which sped up the internationalisation of the centre, started to become visible. Our scientific production increased sharply, and CITTA's researchers became a common sight at the most prestigious planning and transport conferences across Europe and the US. CITTA's annual conferences became well-known in Portugal and elsewhere, attracting more researchers each year. The centre was growing too, incorporating the new generation of researchers while they finished their PhD theses, and attracting more from elsewhere in Portugal and abroad.

In 2010, we were approached by a group of colleagues belonging to CIEC, an FCT R&D Unit at the University of Coimbra that had received a classification of Good, with a proposal to join our centre. The group, headed by Prof. António Pais Antunes, was mainly formed of Transport Planning and Engineering researchers. Their impressive track record in these fields complemented our strength in Urban and Environmental Planning very nicely.

After countless lengthy meetings and discussions, a decision was made in 2012 to restructure and enlarge CITTA to accommodate these colleagues and their expertise and prepare new internal regulations (CITTA, 2012). A fourth research group, on Transport Engineering and Management, was added and substantial internal changes were carried out in the existing Transport Planning group, which was renamed Transport Analysis and Planning<sup>8</sup>. We had gained a second life.

Our total number of researchers almost doubled. The number of Coimbra-based researchers was only marginally smaller than that of their Porto counterparts. In total, we went from just over 50 researchers to almost 100, equally divided between senior members with a PhD, and junior members, who were mostly PhD students enrolled in associated Planning and Transport

<sup>&</sup>lt;sup>7</sup> The CITTA team was constituted by Paulo Pinho (Coord), Sara Santos, Vitor Oliveira, Mafalda Silva and Magda Barbosa.

<sup>&</sup>lt;sup>8</sup> RG1 on planning and environmental assessment, coordinated by Paulo Pinho (at present by F Brandão Alves); RG2 on urban planning and housing, coordinated by Isabel Vazquez (at present by Paulo Conceição); RG3 on transport analysis and planning, coordinated by A Pais Antunes; RG4 on transport engineering and management, coordinated by Álvaro Seco (at present by Adelino Ferreira).

PhD Programmes or young trainee researchers with MScs. By FCT standards, CITTA could no longer be classified as a small R&D Unit, removing this handicap from future FCT evaluations. Furthermore, a beneficial balance had been achieved between planning-oriented and transport-oriented researchers, with each being organised into two research groups.

In 2013, a new FCT evaluation took place. Both CITTA's report and the visit of the external evaluation panel were carefully prepared by all the RG leaders and the centre's Secretary, Prof. Paulo Conceição. The overall scientific strategy had moved forward from sustainability to post-carbon cities. A few months later, in 2014, the final evaluation results were announced. CITTA received a Very Good mark. Reading the panel's report, we all wondered why CITTA had not been awarded the Excellent mark, as most of the comments were extremely positive and encouraging, such as:

"The research vision was clearly articulated around the concept of a post-carbon city – this is novel, genuinely interdisciplinary and was convincingly presented, though young researchers and post-docs seemed to be not as involved as expected.

The management of the Unit is challenging given the fact that they have to deal with two different universities with their own, separate rules. There is excellent evidence of strategic fit to regional and national policies and of international visibility and engagement. There is evidence of service to the community through, for example, the Azores regional spatial plan and the development plans for the Porto and Coimbra metro systems.

The level of international collaboration and visibility is high, with joint supervision of PhD students and involvement in international collaborative projects. Overall, this is a very good Unit, with an excellent vision and potential for the future. The size of the Unit is appropriate, and the Panel found the research vision to be convincingly stated."

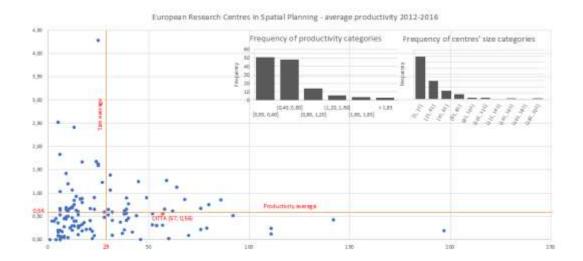
# From the Consensus Report CITTA R&D Unit no. 4427 Ref 14-FCT-235 Panel 07 Multidisciplinary.

Nevertheless, we were all very pleased with the recognition of our scientific work's value and the financial support we received as a consequence. Having come from a Fair mark, it seemed that the most difficult times were behind us. It was time harness our enthusiasm and look towards the future in order to fulfil our ambition of making CITTA a reference European planning and transport research centre.

### 4. Consolidation

In the following years, the number of research projects and the productivity rate rose. Also our ability to attract and mobilise new financial resources increased as we combined FCT, EU, and specialised consultancy funding. A series of internal research seminars was also regularly organised, which became the ideal place to combine the presentation and discussion of the progress of our own projects with presentations by visiting external speakers and foreign researchers. And our annual conferences have now become recurring events with a consistent format and audience of between 120 and 150 participants.

**Figure 1** shows how CITTA compared to similar centres in Europe between 2012 and 2016 as far as publication productivity in ISI/SCOPUS journals is concerned. This benchmarking exercise is flawed, to a certain extent, as publication is just one output expected from a research centre. However, in the absence of better indicators, these metrics are still widely used in the comparative evaluation of R&D centres.



**Figure 1**: Average productivity 2012-2016 measured in the total annual no. of published ISI/SCOPUS papers per total no. of senior researchers belonging to European Research Centres in Spatial Planning (sample of the 126 most representative R&D Units).

In this period, CITTA was well above the European average size of Planning and Transport-related R&D Centres, measured in number of senior researchers. However, its annual publication productivity, which tends to decrease sharply as size increases, was 0.56 papers per senior researcher, right on the European average.

By 2017, the FCT announced another round of R&D Unit evaluations. As with the previous evaluations, all CITTA members, senior and junior, were mobilised to prepare the pluriannual report of activities and the strategic plan in a truly collaborative and engaging exercise which was coordinated by the board, the centre's secretary, and the RG leaders. The panel's visit took place in 2018 and, overall, they were quite impressed with the quality and quantity of research carried out by CITTA's different groups. A couple of months later, the final evaluation results were made public and, finally, CITTA received an Excellent mark, with maximum scores in all the evaluation criteria. This was the classification we had all been looking for and had been working towards for many years. The panel said:

"CITTA is a Research Unit of the FEUP and FCTUC. This distinctive disciplinary lineage characterises the Unit's rigour, remit, and approach. In addressing the overarching theme of post-carbon city, CITTA has distinguished itself theoretically, methodologically, and practically at national and international levels, in the areas of transport planning and management, environmental assessment and spatial planning.

(...) Despite (its) complex profile, CITTA is a coherent Unit, which encourages, supports, and manages diversity.

This coherence is intrinsic to all its operations and transpires from the written submission, staff profiles and exemplars of work, and was confirmed by the site visit of the Panel.

(...) CITTA is much more than the sum of its parts; it is a well-crafted, and experienced organisation. Its location in FEUP/FCTUC is key: despite having a majority of staff with an engineering background, it accommodates a wide range of humanistic and design-based disciplines and interests, hence it operates across a good balance of quantitative and qualitative approaches, theoretical and applicative.

(...) CITTA is extremely productive, with multiple excellent projects (many of which are European or International); collaborations with municipalities; numerous international accolades; several established collaborations with many countries around the world; extremely rich number of scientific

articles published in ISI and Scopus journals, many other reports and publications and n of PhDs. The average rate of publications is close to 0.8 papers/researcher/year which is quite satisfactory and close to well established European research centres.

(...)The impact of CITTA's work is necessarily complex and multifaceted, since its work spans across so many domains and has so many different target groups. It is encouraging to see that its staff pursues and values impact of different nature, ranging from academic metrics, to influence on policy making to consultancy and collaboration with industry (not many yet but growing), to relationships with local communities and established disciplinary organizations. This is a testament of the richness and resilience of the Unit.

Of particular relevance is the Units' explicit ambition to contribute, through its work, transformative impact to policy making, in the broader framework of the post-carbon city. This is ultimately what the best research should aspire to, and CITTA seems fit for achieving this goal."

# From the detailed 4-page Evaluation Panel Report on Arts and Humanities Architecture and Urbanism on the CITTA Research Centre Ref 4427-FCT.

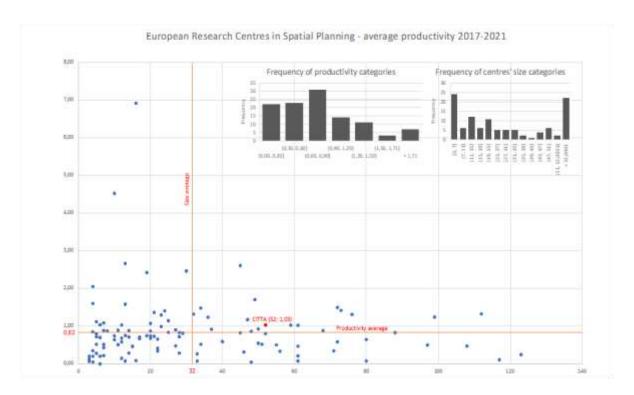
The Excellent stamp of quality brought with it a generous pluriannual financial envelope (2020-2023) for the first time. This was designed to cover current expenses and PhD Fellowships and, most importantly, to allow for the development of the strategic plan<sup>9</sup>. The plan included the recruitment of technical and managerial support staff, several new researchers, and the re-equipping of the Traffic Analysis and Pavement Mechanics Laboratories, at FEUP and at FCTUC respectively. The centre had finally reached the consolidation phase as a European research institution, and could now look into the future with enthusiasm and grounded optimism.

As **Figure 2** illustrates, CITTA's publication productivity increased significantly for the 2017-2021 period, from 0.56 papers per researcher annually to 1.03. This put it well above the European average, which had increased to 0.82. Across the two analysis periods, there had been no significant change in the size of CITTA or the other European centres.

From a quantitative point of view, CITTA's size and overall productivity have reached highly satisfactory levels by European standards. The real challenge ahead of us lies in the qualitative aspects of the centre's research, such as deepening the theoretical and practical relevance of the research conducted and the ability to influence decision-making through the dissemination of scientific evidence<sup>10</sup>.

<sup>&</sup>lt;sup>9</sup> Base Funding for (2020-2023): €777K, plus €1015K of Programmatic Funding, including for 3 (Principal) New PhD Researcher Contracts + 16 PhD Fellowships.

<sup>&</sup>lt;sup>10</sup> The "SPLACH – Spatial Planning for Change" Project is a good example in this respect. Led by CITTA, with the collaboration of DINÂMIA'CET and GOVCOPP, and with a total budget of €1.87 million, it was aimed at guiding Portuguese planning practice towards low-carbon and socially inclusive urban systems.



**Figure 2**: Average productivity 2017-2021 measured in the total annual no. of published ISI/SCOPUS papers per total no. of senior researchers belonging to European Research Centres in Spatial Planning (sample of the 111 most representative R&D Units in that period).

The rationale of the current Strategic Plan can be seen in diagrammatic form in **Figure 3**. CITTA's research focuses on the roles of cities, urban systems and transport infrastructures and services, while considering the complex interactions between the societal system (at the top) and the environmental system (at the bottom). The societal system is comprised of citizens and communities, institutions, governance, and public and private economic structures. Combined, these are capable of shaping labour markets which, in turn, has a strong and transformative influence on cities and regions.

The environmental system comprises landscape and natural resources, energy sources, and geophysical resources. The interaction between the societal and environmental systems generates a wide range of issues and conflicts which are, to a significant extent, encapsulated by the current climate change debate. This, in turn, calls for effective, efficient and socially responsive adaptation and mitigation strategies.

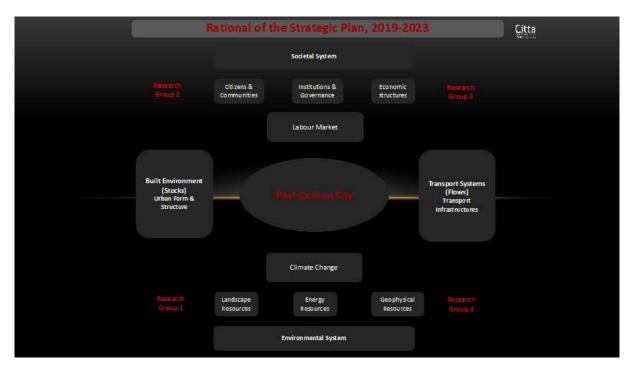


Figure 3: The Rational for CITTA's Strategic Plan (2019-2023)

The horizontal axis shows how, from a metabolic perspective, cities can be seen as a complex assembly of stocks (the built environment) and flows (the transport systems).

The middle of the diagram shows how post-carbon cities have been at the heart of CITTA's scientific strategy for the last decade - the unifying ground on which the diversity of the centre's four research groups is built. This is why each group, according to its own remit and objectives, is placed in one of the four corners. In the general fields of Spatial and Environmental Planning and Transport Planning and Engineering, the research challenge is enormous, demanding a vast and multi-disciplinary agenda designed to facilitate the transferability of scientific knowledge into real-world practice (CITTA, 2018). **Figure 4** shows the relative position and importance of the main topics and areas of research pursued by CITTA's four research groups in accordance with the centre's strategic plan (2019-2023).



"The Planning and Environmental Assessment RG approaches the post-carbon city as an energy-efficient system making the best use of natural and human resources. The city is driven by a sustainable urban metabolism. It offers a healthy environment to its residents and users, who experience high accessibility levels to goods and services. To contribute to the achievement of this vision, this group studies how urban morphology, dynamics of growth or shrinkage, and bioclimatic design influence the overall urban energy performance and carbon footprint. The development of environmental policy instruments (e.g., metabolic impact assessment tools) also features in this group's portfolio."



"The Urban Planning and Housing RG looks at the post-carbon city as a just and inclusive environment where social and spatial divides are addressed through responsive transformative policies. The research conducted by this group is oriented towards facilitating the implementation of such policies. For that, the group critically studies concepts and processes such as institutional innovation, collective capacity building, and policy learning. The coproduction of systematic outcome-driven analytical approaches towards urban policies able to encompass and promote social diversity, fairness, and urban justice principles, constitutes not only a key research topic, but also a policy ambition."



"The Transport Analysis and Planning RG analyses the post-carbon society as a connected environment from the urban to the global scales. At the urban scale, it pays particular attention to issues such as car-sharing, public transport, and active modes of travelling such as walking and cycling. At wider geographical scales, the focus is on analysing modes of transport such as air, rail, and road travel. The goal is promoting more sustainable mobility from an integrated economic, social, health-related, and environmental standpoint."



"The Transport Engineering and Management RG looks at the post-carbon city as a safe mobile environment, scientifically developing and actively implementing speed management and traffic calming solutions through corporate initiatives, aimed at creating high-quality liveable pedestrian- and cycle-friendly urban environments. It promotes the recycling of materials and the life-cycle assessment of transport infrastructures. Improving the energy efficiency of urban transport infrastructures constitutes yet another research goal this group has been consistently addressing."

**Figure 4**: Mapping the main working subjects pursued by the four CITTA's Research Groups. Source: CITTA Report of Evaluation (2018) and CITTA's website.

## 5. Concluding remarks

This paper provides a brief historical overview of the inception, development, and consolidation phases of CITTA as an R&D Unit for Planning and Transport. Given CITTA's scope and my past management responsibilities, it is incomplete and not entirely impartial. This brief overview pointed out how important the timing and institutional context in which a research centre emerges are, as are its capacities to attract creative and productive researchers and win new research projects while following a common and coherent strategy.

Acknowledging that CITTA can hardly be representative of all other centres, this account provides some evidence of how vital the FCT's periodic evaluations are. The underlying evaluation criteria and funding conditions associated with these evaluations undoubtedly shape R&D centres' size, format, structure, composition, and research priorities to a large degree.

Finally, in the context of FEUP, the DEC, and the SPTA's 50th anniversary, it seems appropriate to raise the question of whether, after all, CITTA has added value to the SPTA and, by extension, to the SVC. Or, on the contrary, whether it was a threat to the upholding of the Spatial Planning Division and the Transport Infrastructure Division. Answering this question would require a similar historical account of the evolution of the SPTA and the SVC, highlighting the institutional interactions between them and CITTA. Unfortunately, this is clearly beyond the remit of this paper. However, to answer this question, I would not hesitate in advancing the hypothesis that the development of CITTA largely benefitted both divisions in a wide range of aspects, and this was a win for all involved. Hopefully, the reader will have been able to find out some of these beneficial aspects in this text, and in the others which make this special issue.

### **Acknowledgments**

The author would like to deeply thank all colleagues and researchers who made possible this adventure of creating CITTA and continue actively engaged at present to secure the future of this Centre and of the scientific research in the fields of Planning and Transports.

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