Graduation Plan

Master of Science Architecture, Urbanism & Building Sciences

Graduation Plan: All tracks

Submit your Graduation Plan to the Board of Examiners (Examencommissie-BK@tudelft.nl), Mentors and Delegate of the Board of Examiners one week before P2 at the latest.

The graduation plan consists of at least the following data/segments:

Personal information	
Name	**Emma Swens**
Student number	4661257

Studio		
Name / Theme	User Perspective	
Main mentor	Monique Arkesteijn	Real Estate Management
Second mentor	Hanneke Veldhuis	Public Commissioning
Argumentation of choice of the studio	Before the graduation program started, there were two things I knew for sure. Firstly, with my graduation research I wanted to investigate something that is useful in practice. Secondly, I wanted to research something within the public real estate sector. I became passionate about public real estate during several master courses. However, I had no idea about the real estate problems in the practice of public organizations. Until one day, I got into a conversation with someone from the Dutch Ministry of External Affairs from the Department of Housing and Facilities. Here we discussed the topic of portfolio management, which I immediately became enthusiastic about. After having several conversations with different portfolio managers within public organizations, I came into contact with someone from the Dutch Police. They also have a department for portfolio management. We discussed some issues they are currently facing that resonated with me. I decided to do my graduation with the Dutch Police. The studio that best fits to Public Portfolio Management is *User Perspective*.	

Graduation project	
Title of the graduation project	Office Portfolio Management of the Dutch Police: Alignment of the Strategic Focus and the Operational Focus
Goal	
Location:	Dutch Police
The posed problem,	The Dutch Police are a public organisation for whom the main goal is to preserve the security and the rule of law in the Netherlands. To pursue this goal, 63,161 FTE of personnel are deployed annually. The employees are the

	most important capital of the police; police work is people work. Besides sufficient personnel, the police need sufficient equipment which includes accommodation. By the end of 2022, the portfolio of the police consisted of 824 properties with a total gross floor area of over 1.9 million m2 (Politie, 2022). The police require these buildings to meet high quality standards. At the same time, construction and maintenance prices are rising, the availability of people and materials in the construction industry is under pressure and there are international problems with the supply of building materials (ABN AMRO, 2023). Also, the energy costs are also going up (ENGIE, 2023). As a result, affordability, feasibility, and manufacturability of the accommodation plans per unit defined in 2017 are under pressure (Politie, 2022). New viable accommodation plans have been drawn up and have been implemented. There plans are described in the accommodation vision, real estate strategy, target portfolio and the decision-making process.
	The scope of this study is limited to the offices portfolio. In the current situation, the office portfolio consists of 692,000 m2 GFA (gross floor area), this will be reduced to 403,000 m2 GFA to 535,000 m2 GFA in 2040 (Directie FM en sector Huisvesting, 2023). Herewith, the five portfolio goals and the six pillars, which are elaborated in Chapter 3, need to be taken into account. But not everything can be done at once. Not for the Accommodation Sector, but also not for the user and the market. A realistic and feasible pace of renewal is therefore important to actually realize the ambitions. Decisions about the accommodation of the police are currently made from the expertise or judgement of the real estate manager. In order to support decisions, calculations are made, but there is no tool yet that supports decision-making. An decision-making tool is needed to make trade-offs and to get insight into prioritization at portfolio, portfolio and project level.
research questions and	What is the optimal alignment between the strategic focus and the operational focus of the office portfolio of the Dutch Police to achieve their long-term goals?
design assignment in which these result.	A decision-making tool that supports the decision-making of real estate managers at strategy, portfolio and project level.

Process

Method description

In this research a combination of operations research and empirical research is used to answer the research question. Operations research is the leading method, because the research question suggests that finding an answer requires developing an artefact. Developing an artefact for answering a research question indicates operations research methods. The artefact in this study is the decision-making tool. To answer the main question, sub-questions have been drawn up and these are partly answered using empirical research.

Literature and general practical references

The literature (theories or research data) and general practical experience/precedent that I intend to consult:

- Strategic focus and operational focus: Den Heijer (2011)
- Decision-making tools: PAS-method of Arkesteijn (2019), Binnekamp (2010)
- Public values: Kuitert (2021)
- Alignment: Heywood and Arkesteijn (2017)
- Policy documents of the police (for example: Huisvestingsvisie, Streefportefeuille & Vastgoedstrategie, Sturing besluitvorming and Kaders en Spelregels)
- Interviews with employees of the Housing Sector of the police to obtain insight information

Reflection

1. What is the relation between your graduation topic, the studio topic (if applicable), your master track (A,U,BT,LA,MBE), and your master programme (MSc AUBS)?

   The interaction of human beings and the built environment has to be improved, leading to a reduction of resources (buildings) and a better user satisfaction. A deep understanding of user needs and preferences is an essential component for decision making and performance analyses in the field. The Dutch police is an organization with public goals and a large impact on society. Managing police buildings is never been the primary task. However, they need to set an example to society and have a responsibility to implement public policies, resulting in meaningful, functional, affordable, and sustainable built environments.

2. What is the relevance of your graduation work in the larger social, professional and scientific framework.

   The Dutch police is a public organization whose main objective is to provide security and uphold the rule of law. To do so, the police need adequate accommodation. When police properties are used as efficiently as possible, it will result in a safer Netherlands. The decision-making tool, being applied or developed during my graduation, aims to efficiently reallocate accommodation within the Dutch police. The Dutch police is not the only public organisation that needs accommodation to support its main objective. If the decision-making tool, proves to be effective for managing public real estate, other public organisations can also use the decision-making tool and gain efficiency from it.

   In literature, multiple researchers write about alignment in real estate management (Cooke et al., 2021; Heywood & Arkesteijn, 2017, 2018; Wakefield, 2017). In fact, when the topic alignment is discussed, it is almost always about alignment in the field of Corporate Real Estate. Little is written about alignment in

Public Real Estate. In addition, in the literature alignment is always described at the strategic level. In a study of Heywood and Arkesteijn (2018), 14 models are analysed related to alignment in Corporate Real Estate at the strategic level. What is not written about in the literature, is the translation from strategic focus to operational focus and vice versa. This study makes an attempt to close that research gap.

Finally, a decision-making tool for practice is applied or developed during this study, which creates a connection between science and practice.

References

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