# GEM 2.0: Update to the GEM Model

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### Document management

Date	Version	Change to previous version
12.8.20	0.1	Decision document based on the steering committee and GEM project group documents and discussion in RUDO on 11-6-2020
27.8.20	0.2	Changes in response to the consultation between Peter Bosman, Margriet Jagtman, Arjen Peters, Gerben Smit, and Paul Vos of 24- 8-2020
20.10.20	0.3	For discussion with Wilma de Koning, the GEM Steering Committee delegation, and Suzanne Boelens of 17-11-2020
18.11.20	0.4	Proposal to be discussed in the Executive Board on 1-12-2020
3.12.20	0.5	Proposal to be discussed in RUDO on 10-12-2020

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#### 1. Introduction

The review of the Facilities and Property columns resulted in an improvement agenda with 22 improvement measures and two advisory reports from the Facility and Real Estate review committees. One of these improvement measures is the evaluation of the User - Owner - Model (GEM)¹. GEM is a financial model for settling accommodation costs at Radboud University. This amounts to €45 million to €50 million per year, depending on the calculation method. Radboud University has been using this internal model since 1995.

The initial assumption when evaluating GEM was that, with a limited revision, the model could last for years. However, the review showed that a fundamental revision of GEM is desirable. The university is increasingly focusing on sustainable and efficient use of the campus and its spaces and square footage. The Campus Strategy describes a future campus in keeping with the university's strategic goals. For this reason, a proposal — included in this memorandum — has been made for an adjustment to GEM that is explicitly aimed at achieving these goals.

Given the nature of the proposed changes, a decision regarding the existing university distribution model must be made by the Executive Board (CvB). This means that prior consultation is necessary between the Executive Board, the directors, and the deans, and between the Executive Board and the participational bodies. The outline of the new GEM proposal was discussed with RUDO in June 2020. The recommendations from these meetings are included in this memorandum. If the necessary decision-making for the changes is completed by February 2021, the consequences can be incorporated into the 2022 policy letter. If this is no longer feasible, a number of issues can be addressed in stages and the consequences can be incorporated into the 2023 policy letter.

The document structure is as follows: section 2 contains an evaluation of the current GM; section 3 examines the current developments in the area of housing and the campus in greater detail: what direction does RU want to go in and what is required from the internal financial management in this regard?; section 4 presents an updated GEM that reflects this; and section 5 includes the further procedure.

#### 2. The current GEM

By using GEM, the total housing costs are charged to users (faculties, institutes, and services). The RU's housing costs are spread across the university's units. There are three categories of square footage: I storage, II offices and education spaces, and III laboratory spaces, as well as a 0-category, the "taring spaces" with square footage that cannot be leased. Different settlement prices are associated with the categories. The users (faculties and other organisational units) purchase the square footage from the owner (the Executive Board) and pay an annual invoice for them, which is prepared during the annual budgets. Solidarity in and between users is at the heart of the model.

GEM was developed in 1995 when the buildings were transferred to the universities. The aim of GEM was to identify and maintain the housing costs of the university in an integrated way and subsequently distribute them among the users of the university on the basis of solidarity. The objectives at the time of introduction in 1995 were:

<sup>&</sup>lt;sup>1</sup>The contents of this document have been compiled with input from the members of the project group and the GEM Steering Committee. The steering committee consists of: Ger Boonen, Peter Bosman, Koen Fleuren, Margriet Jagtman, Arjen Peters (chair), and Gerben Smit. The project group consists of: Huub Looijmans (chair), Chris Teunissen, Noud van der Velde, Paul Vos, and Ronald Wilke.

- encouraging cost-awareness regarding housing
- promoting efficient use of space through financial incentives
- allowing users to decide on the nature and extent of their use of space by allocating housing budgets
- overarching optimisation of housing management at RU as a whole

GEM is a cost distribution model that, over the years, has become a predominant tool for the necessary investments in a new campus and new buildings. The importance of GEM for internal funding should not be underestimated.

Partially through GEM, a great deal of innovation has been realised on the campus within the financial requirements RU has set itself. At the same time, GEM has primarily become a model of the owner and delegated owner of the buildings, the Executive Board, and the UVB. GEM has not been as instrumental as a tool for the careful and affordable use of those buildings. In terms of efficient use of square footage, which was also one of the goals of the original GEM, we have seen little happening over the years despite fluctuations in student numbers and resources: GEM's square footage prices appear to have only a limited effect as financial incentives. GEM does not provide operational accommodation standards on which the users, faculties, and services, can base their allocations and layouts either. Except in the case of new buildings, we have also seen little internal joint consultation on housing policy over the years, something that was an explicit intention of GEM. The users are barely involved in the application of the model; the outcome is more or less imposed on them, as if it were a tax assessment, which was certainly not the intention of the original GEM.

GEM also serves as a settlement model for all housing costs in 2020. The usefulness and internal necessity of such a model do not seem to be contested in itself. The current model simply aims to provide a clear final overview of housing invoices, and the administrative settlement is straightforward. The system of charging for reserved education spaces and meeting rooms is also very simple as far as the outcome is concerned. However, a more in-depth look shows that the model appears to have become complex and no longer works very transparently for those directly involved. It appears that the model:

- has been less successful in processing all housing costs in recent years. There have always been additional, incidental costs (e.g. additional costs for asbestos demolition and legionella control) in recent years. The depreciation component also appears to lag behind actual developments in increasing construction costs. Although most of the housing costs are still internally distributed/settled through GEM, housing nevertheless requires additional tools every year on top of the GEM total.
- is receiving less support. The need to internalise all housing costs through square footage rates or chair rates is often no longer understood. Although GEM aims to ensure broad solidarity and responsibility for housing and housing costs, this seems to exist mainly on paper. The existing users want a better idea of and more control over the housing costs they can and want to influence, instead of a general invoice, and they want a university settlement model that supports them in this.
- has limited internal effect in terms of financial incentives. The housing costs are mostly centralised by the units (at the faculty level) and there appears to have been little "giving up of square footage" in recent years, something that the model did assume. The current model is too general in scope, too broad, and not sufficiently attuned to the different types of space and their intended efficient use.

More specifically, attention is needed within the scope of GEM for:

- the definition of housing costs within the university. Firstly, control and management of those costs require clarity and transparency on what is included in housing. The housing policy is moving from new buildings and renovations towards a service concept. Some services have been added to GEM over time (cleaning, security, etc.). The further development of the facility concept will also require new choices and interpretations in the longer term. These have implications for business operations and the organisation behind them, as well as the settlement of their costs.
- more efficient management of "communal areas" such as education spaces, meeting rooms, and general areas. The current settlement rules are of little help here, and the model is less able to deal with the costs of general, communal areas.
- Instead of a broad university square footage rate, a more realistic approach is desirable for those specific housing costs that are very different in terms of both investment and operation and consequently put a strain on internal solidarity, such as the costs of laboratory and sports areas (both have high investment and operating costs). The model is not a good basis for calculating all the costs of rooms for non-funded activities either (tasks and activities of the RU for which there is no government funding), and it does not handle the costs of storage and archive rooms very well.

Finally, the evaluation of the model's operation also revealed that a more integrated project approach is needed for new construction and larger projects. The fixed definition of tasks/costs between the owner and often different users, as laid down in the regular demarcation list, should be replaced by an approach based on one project (budget) with one person mainly responsible for the whole.

In conclusion, it appears that not all the original objectives of GEM have been realised. Also, several current housing issues have arisen to which the current GEM no longer provides a good answer. The follow section will go into more detail of some of these current developments.

### 3. Current developments

Radboud University's Campus Strategy of April 2020 details the objectives and strategies for the coming years. The possible consequences of this for business operations and internal funding of accommodation costs have been investigated by the GEM project group.

The Campus Strategy contains seven development principles. Each goal to be achieved is measured against these principles. The campus is 1. inspiring and connecting, 2. sustainable and healthy 3. open, accessible, and secure 4. lively and dynamic 5. smart and flexible 6. person centred and social, and 7. affordable. The objectives to be achieved and strategies to be deployed are then categorised according to the areas of education, research, impact, people, and facilities. The concrete objectives, including a multi-annual investment forecast, will be included in the Campus Plan, which must be ready for decision-making by the end of 2020.

The housing ambitions have undeniably been expanded and deepened with the introduction of the Campus Strategy. This makes it all the more important to keep a close eye on RU's total housing costs. There will also be additional costs, such as for the realisation of sustainability goals, an even greener campus, and a campus centre. In the current GEM, almost all costs are settled. However, it does not seem advisable to allow all costs to continue to be eligible for settlement. Issues such as landscaping, traffic, logistics, etc. are typically matters that are or must be decided at the university level and to which charging decentralised users would add little.

The Campus Strategy outlines a target image of iconic buildings for faculties. At the same time, there is an ambition and a need (efficient use of available spaces) to make many spaces eligible for joint or flexible use in the future. Efforts have started to bring the study workspaces under unified control and management with the primary purpose of studying. These study workspaces have been transferred to Campus & Facilities as of 1 October 2020. A central, digital testing facility will also be set up and, in 2021, an investigation will be conducted into merging the management of education spaces, among other things. In short, a shift is taking place towards more shared facilities. This raises the question within GEM as to which unit should then be charged as the user of these facilities.

If more facilities become communal and a number of facilities should no longer be charged for, the question also arises as to which facilities should be charged to specific users via the updated GEM. RU also wants to make sustainable and in turn, optimal use of its spaces. The price incentive has not proved sufficient in this regard. Additional policies are needed in this area.

The Campus Strategy introduces the development of a workspace concept. It is conceivable that workspaces will be offered with an owner-user model and that payment will be made per workspace obtained. However, the development of the workspace concept is not yet advanced enough for an internal settlement system to be based on it. It still requires elaboration and agreement within the university about the definition of a workspace and how it should be organised.

In addition to the developments related to the Campus Strategy, there is another important current development: the COVID pandemic. This leads to a completely different use of the campus, in terms of office space (largely working from home), education space, and study rooms (an increase in digital education and studying at home). The lasting effects of the pandemic on the use and organisation of the campus cannot be predicted at present. For this reason, the updated GEM should be flexible enough to respond to developments.

## 4. An Updated GEM

It has emerged that while the existing GEM has contributed well to funding the renovation of the buildings on the campus in recent years, it appears to be less well equipped for the efficient operation and sustainable use of the campus and its facilities. In order to realise the objectives of the new Campus Strategy in the coming years, the existing GEM system needs to be adapted.

Based on the evaluation of GEM and current developments, this section presents an update to GEM. The objectives of the updated GEM for the distribution of housing costs are:

- efficient operation of the buildings on campus
- sustainable and optimal use of the buildings on campus
- sharing the costs

The main points of the GEM update are discussed below in 4.1. to 4.7.

#### 4.1. Explicit consideration of the percentage of housing costs

It is important that the overall housing costs of RU are properly monitored so that an explicit policy can be developed accordingly at the university level. Maintaining an overall view is done

via the financial administration; GEM is not necessary for this. The definition of housing costs is in accordance with the common definition, such as the definition in the benchmark of Dutch universities. RU's current policy is that the cost of housing can be around 9% of annual turnover. This percentage can be adjusted on the basis of decision-making, which has consequences for the funds directly allocated to education and/or research<sup>2</sup>. Based on the experience of the past few years, two factors appear to be particularly important for achieving this percentage: repeatedly disappointing incidental costs (related to additional legal requirements, legionella provisions, fire safety, and asbestos removal and demolition) and probably increased costs for building maintenance, especially installations, in the near future as well. This does not yet take into account additional investments required for sustainability measures and other Campus Strategy ambitions. Structural deviations from the existing 9% target rate require explicit decision-making.

#### 4.2. Only charge costs that users can influence through their own policies

GEM has proved to be a good supporting model for funding the many innovations on the campus. The underlying principle of Owner (Executive Board) and User (faculties and supporting divisions) can remain intact. However, the existing model assumes that the total of the university's housing costs is charged to the users via annual invoices, whereas in the future only those costs that the user can directly influence will be charged. The consequence of this is that part of the housing costs will remain at the central level. This is reflected in the size of the resources that can be allocated to faculties, institutes and services through the university distribution model. The one-time changes to the distribution model that this entails should preferably be implemented in a budget-neutral manner.

Housing costs over which users have little or no influence could be:

- costs associated with roads and grounds
- safety and security costs
- municipality expenses

Of course, with this change, the overall cost of housing should still be clearly visible at the central level, but a substantial part of the costs can remain at the central level.

#### 4.3. Users pay for office space, reserved education spaces and meeting rooms, and storage areas

GEM's evaluation shows that the current rates do not easily lead to more or less space being taken up. Nevertheless, the proposal is to continue to foster cost-consciousness and awareness of the potential, unnecessary use of space by continuing to charge a rate for square footage of office space and storage space, and for the use of education and meeting rooms, as is currently the case. The costs will be shared collectively through an average unit price for each of the different types of space. For example, a square metre of office space has the same price in all buildings. In this sense, the solidarity that is also built into the current GEM is maintained in GEM 2.0.

The GEM rate is split into two components: a housing component (capital costs) and a service component (energy, cleaning, etc.). This is done to make the structure of the price per square metre as transparent as possible, but also to stimulate the discussion about the optimal service in relation to the rates to be paid.

<sup>&</sup>lt;sup>2</sup> The percentage may need to be adjusted in 2021 due to the demerger of Radboud University and Radboud university medical center.

On top of the housing component and the service component, there is a third category, specifically general facilities for the entire campus. The costs for this are not charged.

The square footage price for office space can be determined annually, in principle on the basis of an approximation of the actual cost of that square footage. Faculties are consequently confronted more directly with answering the question of the need for space and the costs involved. It is important that this question is systematically addressed in the policy and control cycle (the administrative coordination between the Executive Board and faculties/divisions).

With regard to storage spaces, it could be further investigated if and to what extent users need their "own" space here. On the one hand, users appear to have different storage needs and, on the other hand, there also seem to be possibilities for more collaboration and collectivity in, for example, written archiving and physical storage that is still necessary.

The existing system of paying on the basis of the reserved education space will remain in place. The level of the prices to be charged annually should be determined after consultation with the users. Although the direct users (lecturers and students) of the education spaces have limited insight into the costs of their use, the faculties' and services' management can inform and raise awareness among lecturers and students about the efficient and sustainable use of the facilities. Over time, charging for educational use may be dropped, but that presupposes planning and scheduling that in itself leads to optimal (and efficient and sustainable) use of space. We have yet to reach that point, which is a reason to keep the financial charging for the use of the educational facilities as it is.

#### 4.4. Separate Agreements with Users on Special Square Footage

Agreements on special square footage are made between the owner and the specific user, instead of the current consolidation of the relatively high costs of this footage into general tariffs. This particularly applies to laboratories and square footage of sports, both of which entail high costs in terms of investment and operation. It would benefit the transparency of the housing costs to include them separately.

The housing costs for activities not paid for by the government are also charged separately. Here, the minimum requirement is that at least all actual costs are charged to the users of these activities and, furthermore, it is questionable whether a mark-up can be applied here. It also raises the question of greater uniformity in the various activities at RU in this area (e.g. postgraduate education, commercial education, CPO, etc.). This requires a separate evaluation.

#### 4.5. "Joint users" in addition to the current users

Given the choice of iconic buildings as home bases for students and staff of faculties, the owner-user model can be maintained as a basis. However, there is also a move towards more collaborative and flexible use of spaces, many of which are located within these iconic buildings. In order to optimise the use of these spaces, they need to be managed jointly and uniformly. In addition to the faculties and support departments as users, a "joint user" is therefore established to manage the joint flexible use spaces:

- all study workspaces on campus (joint management realised by 1 October 2020)
- all education spaces and meeting rooms

- all general spaces and hallways
- specific rooms for general use (e.g. teleconferencing rooms, research rooms to be designated).

The joint user manages the above-mentioned areas, makes agreements on them with the owner, and is allocated resources for this purpose. The joint user works as a staff department for the owner and users and provides operational support. The joint user is a department within the Campus & Facilities division. Within this department, the various tasks in the area of space management that are currently housed in different places will be concentrated. These include tasks in the areas of financial management, timetables, equipping lecture halls and facilities, and maintenance. The proposed structure of Campus & Facilities provides for such a department. Future investment in the necessary expertise is required.

#### 4.6. University standards are developed and applied for the usage of office space

RU strives for optimal use of the spaces and facilities. In general, compared to other universities, the RU has a reasonably high amount of square footage of office space per FTE (over 14 m²)³. There are currently considerable differences between faculties in the number of m² per FTE as well. Furthermore, the figures on the average use of this space are between 35 and 40, which is generally considered low.

For the offices, the current price incentive of GEM seems insufficient for achieving the objectives of sustainable and efficient use as expressed in the Campus Strategy. In addition to the price per square metre, university standards should be developed for the allocation of office space and the determination of long-term needs. In view of the objectives of the Campus Strategy and the use of space achieved in other comparable large organisations, a clear-cut ambition is desirable: on average, 10-12 m² per FTE and 50%-70% usage seems feasible within a period of 5 years. Elaboration of these standards for different users and buildings is necessary and a proposal for this will be developed within a year of the final decision on GEM.

# 4.7. Housing usage becomes a systematic subject in the policy and control cycle and is given regular consultation at the policy and operational levels within RU

It is important that housing and the future need for space become systematic topics of discussion between the Executive Board and the users. This is still not sufficiently the case at present and is often limited to larger new-build or renovation projects. For a systematic approach through discussions on the budgets and annual reports, the joint user's staff can provide the agendas with information on actual usage, costs, future developments, and needs, etc.

The joint user provides and maintains a good internal consultation structure on housing matters at an operational level. Campus & Facilities also consults with faculties and other major users at a tactical level. This includes issues such as sustainability, good use of space, and the optimum size of the unit's area. Reports are regularly submitted to RUDO at the policy level, where decisions are discussed. Given the importance of the subject, it is recommended that a subcommittee of the RUDO is established to participate in the quarterly property consultations with the portfolio holder in the Executive Board.

<sup>&</sup>lt;sup>3</sup>From 2008 onwards, the Collier consultation agency — commissioned by a number of universities including RU — has been carrying out a benchmarking study into the results and costs in the area of housing policy and facilities policy. The last study is from the end of 2019: "Benchmark 2019 multi universiteiten kosten 2018", Colliers International, October 2019.

## 5. Further procedure

The updated GEM is described above, which is linked to a shift in resources that should be carefully implemented. This has been taken into account in the procedure below.

Activity	Actor
Concept discussed with portfolio holder	Arjen Peters/Gerben Smit
Proposal discussed with the Executive Board	Gerben Smit
Proposal discussed in RUDO	Gerben Smit
Proposal discussed with deans	Executive Board
Progress discussed with the	Arjen Peters/Gerben Smit
portfolio holder	
Informing the participational bodies	Executive Board
Proposed decision regarding the proposal	Executive Board
Submitted for approval to the	Executive Board
participational bodies	
Final decision about the proposal	Executive Board
Consequences are assessed for the	F&C director
policy letter 2022 or 2023	
Implementation along the line	F&C and C&F directors