

# **Voluntary urban land readjustment: influencing factors on owner empowerment**

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**Key words:** urban land readjustment, owner empowerment, Cadastre, pilot projects

## **SUMMARY**

The challenges for spatial planning in the Netherlands have significantly changed during the last years. Until 2008 the focus was on the expansion of urban development. Now, as a consequence of the economic crisis and decreasing demand there is increasing attention for regeneration of existing urban areas. On the other hand more and more small scale, flexible citizen initiatives determine how space is used in the Netherlands. Because of these developments, the Dutch administration is constantly seeking to implement new spatial planning instruments that can deal with flexibility and bottom up initiatives.

One of these instruments is urban land readjustment. The instrument makes it possible for owners to voluntarily exchange property of land and solve problems which are caused by an inappropriate parcel structure. It is a bottom up approach where land- and real estate owners can work together to find solutions for degrading urban areas. The instrument can for example be used to make city centres more compact and resilient. It is only one of the land policy instruments, and will be most effective in combination with other instruments.

This paper focusses on the critical factors that influence the success of urban land readjustment initiatives. These factors are derived from case studies accompanied by the Dutch Cadastre. Founded on these practical cases, there are six critical factors identified which determine the success of processes with the instrument of urban land readjustment:

1. The degree of owner organisation
2. The availability of an independent area 'director'
3. The possibility of financing in advance
4. A positive business case
5. An open mind regarding interests
6. An equal sense of urgency

These critical factors are illustrated by four case studies (Maasbracht Koeweide, Helmond Induma-West, Rotterdam Brainpark, and Doetinchem De Veentjes). The main question in stimulating urban land readjustment seems to be: how can one manage the sense of urgency to the individual owners in such a way they begin to act? One part of the question is: take all interests of all owners into account. An independent area manager has an important role here. The other part of the answer is that the individual business case of each participating owner has to be a positive one. This can be reached by increasing the deliverables or reducing the costs. Stimulating urban land readjustment has to focus on this aspect. When starting a project in urban land readjustment one has to consider if the six critical factors on owner empowerment presented here, are sufficiently addressed within the actual case. And if not, how you can improve these basic principles in advance.

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## **1. INTRODUCTION**

During a long time area development in the Netherlands distinguished itself from development in other western countries by a top-down approach. Since the economic crisis, starting in 2008, new strategies are needed (Van der Krabben and Heurkens, 2015), for the former strategy doesn't work anymore when demand on housing drops.

One of those new strategies is urban land readjustment. Urban land readjustment has been subject of discussion for a long time in the Netherlands, but is never implemented (Bregman, 2015, Groot Nibbelink, 2016). The Dutch administration has now proposed legislation for voluntary urban land readjustment (Ministry van Infrastructure and the Environment, 2016) in addition to the current land policy instruments. Urban land readjustment can be used in redevelopment projects where fragmentation of ownership is an issue.

The Minister calls urban land readjustment an instrument for the energetic society. Land owners who are willing to realise building or redevelopment plans by themselves are able to overcome impediments e.g. an infelicitous allotment. Urban land readjustment gives empowerment to the owners.

Due to the revival of interests, experiments on urban land readjustment take place. Can we learn from those cases in which context urban land readjustment will work? More specific: are owners able to cooperate in order to raise a land readjustment project? What kind of factors influence the success or failure of these projects and how does the regulation of urban land readjustment take effect on it?

## **2. ADDITIONAL ACT ON LAND PROPERTY**

### **2.1 Revision of land policy instruments**

The Dutch government including municipalities have changed their spatial development strategy (Ministry of Infrastructure and the Environment, 2016). Differences between regions increase. While most cities in the west of the Netherlands face a new increasing demand for housing, in northern and eastern provinces a decline of population numbers is still going on. A shift is made from building on green fields to building on brown fields. Too many zones are reserved for offices and shops, and therefore vacancy in these functions still increases.

Society itself changes too. More and more citizen initiatives come up and they expect the government to react adequately and flexibly. That is the reason why the Dutch government adjusts the system of spatial planning in the Netherlands. In certain cases a municipality still wants to participate in an active way by acquiring land, in other cases it will facilitate the owners more and more. Therefore spatial planning instruments are revised at the moment and

become more flexible. Beside of revision of land policy instruments like expropriation, pre-emption right and land consolidation, the government now introduces a new instrument in the Netherlands: urban land readjustment.

## **2.2 No compulsory way of urban land readjustment**

In 2014 the Commission for Urban Land Readjustment advised the Minister of Infrastructure and the Environment to establish a committee to give advice regarding the introduction of rules for compulsory urban land readjustment, in the case that a majority of owners agree to a readjustment plan that is blocked by a minority (Commission for Urban Land Readjustment, 2014). Unfortunately the Minister did not incorporate this compulsory way of urban land consolidation. She argues compulsory urban land readjustment is unnecessary and undesirable (Ministry of Infrastructure and the Environment, 2015, see also Groot Nibbelink, 2016). Not necessary, according to the minister, because expropriation is the most preferred instrument, when one of the owners will not or cannot join the redevelopment. Not desirable, because compulsory urban land readjustment contravenes property rights severely and owners can be forced to take risk in development.

Bregman thinks the first argument implies urban land readjustment cannot be seen as an independent instrument for facilitating land policy anymore and the last argument is based on two misunderstandings. The first misunderstanding is the assumption that property value is less in case of land readjustment comparing to expropriation and the second misunderstanding is land readjustment convenes land property rights more severely than expropriation. Bregman contradicts both (Bregman, 2015). Also De Zeeuw thinks the Minister is missing the essential point. Just the presence of the possibility to use compulsory land readjustment, will promote owners to participate and to collaborate. When one takes the stick to beat away, the proposal of the committee is castrated (De Zeeuw, 2015).

## **2.3 Goals for urban land readjustment**

It is important to consider why rules for urban land readjustment are needed.

The Minister her selves explains the following: Urban land readjustment is a facility for the energetic society. With these rules owners can realize building or redevelopment plans by their own. Urban land readjustment makes it possible for owners to exchange property of land and solve problems which are caused by an inappropriate parcel structure.

Possibly it can be attractive for owners to adjust the boundaries of their land or to exchange real estate property, in order to settle down at a more appropriate site. Especially in areas of economic decline and unoccupied shops or office buildings, urban land readjustment can contribute to area transformation and restructuring (Ministry of Infrastructure and the Environment, 2016).

Urban land readjustment is therefore and instrument which can be stimulated by a facilitating municipality. It is only one of the land policy instruments, and will be most effective in combination with other instruments (Expertgroep Provincie Overijssel Stedelijke Herverkaveling, 2016).

One has to consider urban land readjustment suits only in certain cases. Analysing literature (e.g. Commissie Stedelijke Herverkaveling, 2014, Van der Krabben and Heurkens, 2015, Cadastre, 2016, Expertgroep Provincie Overijssel Stedelijke Herverkaveling, 2016) result in

mainly three elements, found in descriptions about the applicability of urban land readjustment:

- There is a spatial demand for development
- The current fragmentation of ownership impedes this development
- Owners have an essential role in raising the development.

The goal of the regulation of urban readjustment is to give owners an instrument that empowers them to start the area transformation. The owners then have the key to success to urban land development. Nevertheless, with urban land readjustment as proposed by the Dutch government success is not guaranteed. It is still based on voluntary participation, so owners can withdraw at any moment. So it is not enough to design an adequate instrument, it is even more essential that the process which empowers the owners is successful. Therefore the Dutch government also wants to stimulate owners to start with voluntary urban land readjustment. Besides the instrument (par. 2.4) the Dutch governments also invests in the process (par. 2.5).

#### **2.4 Content of the regulation on urban land readjustment**

The proposed rules for urban land readjustment are part of the new Act on Spatial Planning and the Environment. This act will probably be in force in 2019.

Special to the rules now proposed is these are almost identical to the rules for voluntary land readjustment in the rural areas. There are no specific elements added to the urban regulation regarding the urban context. In essence the way of voluntary land readjustment in rural areas now becomes possible to urban areas.

This means at least three owners are needed who bring in land and at least two of them get land in return. Owners make up an agreement and have to register it in the land registry of the cadastre, anticipating formal checks, the delivery of the real estate and finishing the readjustment deed. Legal successors, for instance the inheritors when an owner passes away, are bound by the registered agreement made by the deceased person, even when the exchange of land wasn't executed yet.

Registering the agreement protects the participating owners for unexpected situations like the situation the person known as owner in the land register appears not to be the legal owner<sup>1</sup>. Due to the new rules it is also possible to exchange condominium rights. Of course this is important to the urban context, while apartment buildings can be part of the reconstruction area. But the regulation gives no specific added rules for condominiums. This means when a land readjustment plan also includes merging or splitting apartments, all owners of the condominium has to agree to the readjustment plan. This makes exchanges of condominium rights still very complex.

Another advantage of the proposed regulation similarly to rural areas; it will not be necessary to re-establish mortgages again in all cases. This has to be worked out furthermore. But this is an important advantage, since the conditions on giving mortgages are sharpened during the economic crisis.

#### **2.5 Stimulating program on urban land readjustment**

Although the rules are almost the same, urban land readjustment is quite different from rural land readjustment. Private stakeholders and local governments face different unsolved

questions. The interests of stakeholders in urban areas are more divergent and a variety of private activities is involved. Financial interests are more significant and due to fragmentation of rights reallocation is more complex. In general in the urban area the municipality does not only play a public role, but also investigates possibilities in public-private partnership. Therefore the process of readjustment will be different, different calculation models will be needed and the relation between private and public stakeholders will be different.

Also the Minister of Infrastructure and the Environment realises these are real problems. That is why she is starting a stimulating program in 2016. Owners have to be triggered to attempt urban readjustment before the new rules are implemented.

The differences between rural and urban context are the reason for developing new methods and models. The stimulating program supports this in two directions. Firstly the Minister wants to offer general tools, partly to inform stakeholders (leaflets, websites, and meetings) and partly to make stakeholders more confident with urban land readjustment (serious game) and partly to reach out to stakeholders with practical models (calculation model and model for a readjustment deed).

Secondly the minister wants to support elected pilot projects. These pilot projects combined are a community of practice in which experience can be shared. The pilot projects also receive a small amount of money to manage the readjustment process.

The Dutch Cadastre, Land Registry and Mapping Agency is involved to this stimulating program because of the knowledge and experience in readjustment processes. During the last three years the Dutch Cadastre has been involved in various pilot projects starting urban land readjustment programs. Lessons are drawn and brought in to the stimulation program.

### **3. CRITICAL FACTORS WHICH INFLUENCE THE SUCCES OF URBAN LAND READJUSTMENT**

The research on critical factors for the success of urban land readjustment is very limited. The Dutch Cadastre, Land Registry and Mapping Agency gained experience in the field by accompanying many initiatives that make use of this instrument. Founded on these practical cases, there are six critical factors identified which determine the success of processes with the instrument of urban land readjustment.

#### **3.1 Degree of organisation**

Land- and real estate owners within the project area need to be well organised. The better the individual property owners are organised, the better the chances are that urban land readjustment will lead to success. A highly organised group often means that property owners are aware of the fact that working together will benefit the whole area. A well-known example of organisation is when a community of owners is present. Additionally, this makes it easier to mutually communicate with each other and with governmental institutes.

#### **3.2 The area 'director'**

The area director is important when it comes to taking note of interests and eventually mediation between different interests. For this task a professional is needed, who probably does not do the job for free. Therefore some financial means from a governmental party or from the collaborating owners in the area is necessary. Having confidence in a successful end result is essential for parties wanting to invest in an area director.

### **3.3 Options financing in advance**

In many cases it is necessary that the cooperating parties need to invest in advance to eventually benefit from it. Not every party has these financial means to do so. Therefore there is need for a party that is willing to invest in advance. For instance this can be done by a revolving fund. Caution is at its place here, because not every financial construction is allowed by European law. One has to be aware of illegal subsidies for private businesses.

### **3.4 Positive business case**

It is obvious that a positive business case is of great importance. Otherwise it is not sensible to invest. The business case must be positive for the project as a whole and for the individual participants as well. An independent organisation can calculate various scenario's to determine if it would result in a positive business case and to determine how many years it would take to earn back the money invested.

### **3.5 Openness regarding interests**

It is not always in everyone's interest to share future plans with the neighbours, because these parties can also be the competitor. However, during a participatory process it is essential that participants are open to one another. Only if everyone is transparent, all options can be openly discussed.

### **3.6 Equal sense of urgency**

Often the sense of urgency to act in an area is present. However, the degree of this sense of urgency can be experienced differently by each participant. Some parties think they can manage on their own, and they think they can work independently. However, one thing you would like to overcome is free riding. This is when a party does not contribute to the development process, and at the same time profits from the efforts of the other parties working together. Therefore an equal sense of urgency is eminent to make sure that every party can contribute at its best efforts to the common goal of improving the spatial characteristics of the area.

## **4. PRACTICE OF URBAN LAND READJUSTMENT**

### **4.1 Introduction**

These influencing factors are derived from experience in several pilot projects. In this paragraph we explain four of these projects and discuss how these factors did influence the owner empowerment. Two of these projects, Maasbracht Koeweide and Rotterdam Brainpark, are evaluated before by Raanhuis (Raanhuis, 2016).

### **4.2 Maasbracht, Koeweide**

#### **4.2.1 Context**

Koeweide is a water related industrial area at the port of Maasbracht, laying at the river Meuse. The port of Maasbracht is the most inland lying harbour of the Netherlands, where sea ships can arrive and where cargo has to be trans-shipped to smaller inland vessels. The industrial area of Koeweide measures 55,7 hectare. One third (18,2 hectare) is owned by five owners, who represent the ship building sector in Maasbracht.

Koeweide is one of four water related industrial areas of the municipality Maasgouw.



Figure 1 Ownership at Koeweide

#### 4.2.2 Problem

Mainly there are three spatial related problems in the Koeweide area. The first issue is the length of the quays. The ship locks in the river Meuse are lengthened in the last decade, so taller ships can reach the port of Maasbracht. The length of a quays owned by one owner are too short for docking with these taller ships.

The second problem is that three companies in the south part of the harbor are not able to expand. Almost all parcels are used and the neighbouring parcels are not available for expansion.

The last issue is that more and more ship building activities do not fit the environmental rules. There is an expansion of the maximum allowed level of noise in the southern part of the harbour. In the northern part the maximum level of noise allowed is higher – there are no dwellings in the neighbourhood – and this level is not yet reached.

#### 4.2.3 Approach

In Maasgouw a project group was established to reconstruct the water related industrial areas in Maasgouw. Urban land readjustment was one of the measurements considered by the project group. A new allocation of the parcels of one of the owners at a new quay could give more expansion possibilities to the other owners. Three alternatives for reallocation of plots proposed to the owners were discussed in a common meeting. The owners preferred one of the alternatives, and this alternative is refined during individual conversations by the Cadastre with the owners. In a second general meeting the owners were given a better insight in the general costs and in the costs for individual owners.

#### 4.2.4 Discussion

In Maasgouw there was no organised community to represent the owners. One of the owners was represented by his agent, this obstructs the openness of interests. There was no independent local area director to lead the conversations. Cadastre took this role in the individual conversations and the project group in the general meetings. The sense of urgency for the readjustment was different between the owners, three of them experienced a high sense of urgency, two a low sense of urgency (Raanhuis, 2016). On the other hand, most owners expected a high profit to be obtained by one of the owners who did think there was a low sense of urgency. Some owners thought the costs were too uncertain and their investment should become too high to earn it back in a reasonable period of time. Finally one of the owners quitted the process and the project was stopped.

### 4.3 Helmond, Induma-West

#### 4.3.1 Context

In 2013 the municipality of Helmond started the reconstruction of the industrial area Induma-East. This area suffered from a bad appearance of business facades, an outdated public space,

bad sewage and parking problems. A spatial impulse was needed. Accordingly, the municipality initiated a traditional restructuring task because at that time there were still some financial means available to purchase plots and real estate for the benefit of a better spatial design of the area. The reconstruction was a success. However there was still a challenge ahead for the neighbouring area of Induma-West. This time the basic situation was changed. Because the budget for reconstruction was significantly cut, there was no potential for spatial interventions by the municipality. A new approach was needed.

#### 4.3.2 Problem

Induma-West is an industrial area of approximately 6 hectares. It dates back from the '60 and nowadays it is characterised by an outdated appearance and unattractive building facades. Independently of the degradation of a large part of the commercial units in the area, this also means that the public space does not meet present day requirements. The road profile for the supply of goods is insufficient, the pavement is degraded and the sewage system is outdated. Additionally there are parking problems mainly caused by the nearby social facility of the municipality.

#### 4.3.3 Approach

Just as was the case in Induma-East, the municipality started the process by collaboration between the BOM (Brabant Development Company), the SBH (Industrial Foundation Helmond) and the municipality itself. These parties requested the assistance of the Dutch Cadastre to experiment with voluntary urban land readjustment. At first the municipality did not have high hopes for this approach. However, the first meeting with a group of land- and real estate owners proved them otherwise. The owners were surprisingly open to each other about their plans for the future. Several concrete readjustment proposals were presented in the following meetings.



*Figure 2 Meeting and sketch session group of land- and real estate owners*

#### 4.3.4 Discussion

As was discussed in the previous paragraph, the land- and real estate owners in the area are surprisingly open to each other regarding their future plans and their interests. All of them are aware of the need for a common strategy in the area to turn the tide of degradation. However, some of the owners have a higher sense of urgency than others. Some owners want to expand



and invest a significant amount of resources. Others are fine with some minor refurbishment activities.

At least the owners in the area are well organized. Their common interests are represented by the SBH. This foundation also delivers one person who can be seen as the 'area director'. He fulfils the function as intermediary person between the owners and the municipality. The BOM is involved because of their experience with many reconstruction activities in the province of Brabant. This party also has the ability to finance spatial interventions by private land- and real estate owners in advance. The idea is to use the principles of a revolving fund. At this moment it is not sure whether these interventions would lead to a positive business case. However, some of the owners in the area are already sure about their positive business case, at least if competitive trading prices are used. This is a significant challenge because some of the land owners in the area simply ask an unreasonable high financial compensation for their plots. They want to maximize their revenues. To enhance the process, several local real estate agents are asked to determine what would be a fair price to trade land in the area. The intention is that this will bring supply and demand more in line with each other and boost the process to a successful transformation of the area.

#### **4.4 Rotterdam, Brainpark**

##### **4.4.1 Context and problem**

Rotterdam Brainpark is a mono functional business park situated at the highway at the one hand and at the other hand the Erasmus University of Rotterdam. This park measures about 16 hectares and counts 24 office buildings. The vacancy rate of the office buildings is about 30%. Four owners are working together in an association of owners. These four owners represent 15 of the 24 buildings, the remaining office buildings are owned by investors who possess only one building in Brainpark.

The four owners want the park to become more attractive and livelier. To reach this goal new functions can be added to the public space and office buildings can be transformed into student apartments or startup offices.

#### 4.4.2 Approach

The initiative for the project is taken by a project developer. A project group is established with a representative of the owners, an architect, the project developer and the Dutch Cadastre. This project group has contacted each owner about the goal and the approach of the project. The project group collected information about vacancy, tenure prices, technical installations, value etc. Two meetings were held together with the owners. During the first meeting the owners brainstormed about the potentials of the area. Between the meetings the architect translated this potentials in a zoning plan with development possibilities. In the second meeting the zoning plan was discussed and it was explained how exchange of real estate and land could help to realize the plan. In this second meeting the municipality was present, too.



Figure 3 Development zoning at Brainpark

#### 4.4.3 Discussion

During the two meetings it became clear there was a distinct difference in sense of urgency felt by different owners. One of the owners possessing buildings in the zone most appropriate to transformation did rarely have to deal with vacancy. There was no need for him to participate in the plan. Two of the other owners felt a high sense of urgency. On the other hand all owners regarded the project mainly as a pilot, a try out (Raanhuis, 2016). So maybe none of them was really convinced urban land readjustment is the best way to solve the problems faced. The owners were well organised, but in both meetings not all were represented. The owners were also not all willing to discuss their interests openly and share information. The process management was done by the project developer, who had a significant interest regarding the success of the project, for this should generate business to him.

During the second meeting financial consequences could not be given. One of the representatives did not have the authority to speak on behalf of the real owner. It seemed to be there was more intention to get information than to bring information (Raanhuis, 2016).

The municipality was not very concerned. At the one hand the municipality did support the private initiative; on the other hand the area had no priority regarding spatial facilitation. The municipality turned out to have other interests, when new student housing was permitted at

the neighbouring university campus, instead of transforming office buildings to student apartments at Brainpark.

## **4.5 Doetinchem, De Veentjes**

### 4.5.1 Context

Doetinchem De Veentjes is part of the experimental program of the province Gelderland on urban land readjustment (PSH). Within the program there are several cooperating parties who work together in cases to study the functioning of the instrument of urban land readjustment in practice. In Doetinchem the research focusses on the question how urban land readjustment can contribute to the transformation of the area De Veentjes and the nearby area around the Dr. Huber Noodtplaats.

### 4.5.2 Problem

The municipality aims at the consolidation of the city centre. The area of this case study is situated just outside of the city centre. However, both areas are dependent on each other because there is a limited program for retail and housing in the area. It is sensible to consolidate this area as a unity. On the other hand, the municipality tries to stop the degradation and to reduce the vacancy. The main challenge of this area is to find a new future-proof identity for the area that is complementary to the remaining part of the area. At the same time the municipal property in the area should be used in a more efficient way. The study area of De Veentjes and the Dr. Huber Noodtplaats is around 13 hectares and there are over 60 owners involved.

### 4.5.3 Approach

The municipality initiated four exploratory meetings, nine bilateral talks and 3 discussion meetings with the involved owners. At first a scenario was developed which resulted in a negative business case. However, this collective business case was financially more attractive in contrast to a scenario where every owner would invest individually. Later the Bank Dutch Municipalities (BNG) developed an alternative scenario which led to a positive business case. These efforts have led to two spatial programmatic scenarios. The first aims at the development of a food court, the second on the development of a residential care concept. Both of the scenarios are financially substantiated by calculations of the Bank Dutch Municipalities (BNG) and supported by a development strategy.

### 4.5.4 Discussion

Despite of the fact that the BNG concludes that the transformation will result in a profitable investment, many of the owners in the area would have to mark down their property values. The sense of urgency is present. However, this sense of urgency is not experienced equally by all parties. Additionally there is no strong belief in working together. Some owners prefer to develop their property independently. For instance, one real estate developer has received a promise from the municipality for his site within the area. For this developer it is not essential to cooperate with the others, because he can develop the site independently from the others. Consequently it is also not possible to involve this site in the urban land readjustment process. Additionally, the common approach for urban land readjustment would also need a more prominent investment in process management. However, until this moment there is no independent consultant who connects all parties as an 'area director'.

At the moment the process of urban land readjustment is still ongoing. There are exploratory meetings for the Noodtplaats. Additionally, there are some new calculations for De Veentjes by the BNG. And now the decision making process is still in procedure.

## **5. DISCUSSION**

The experiences with urban land readjustment are all based on a voluntary readjustment process. At this moment this is the only way in the Netherlands, for there is no act on compulsory land readjustment available. This also impacts the process of voluntary land readjustment. Owners feel more pressure to make deals when they otherwise should be forced to a legal readjustment.

The consequence is that the success of urban land readjustment mainly depends on good process management. Factors influencing the empowerment of the owners and in such way the success of the process, are mainly:

- The degree of owner organisation
- The availability of an independent area director
- The possibility of financing in advance
- A positive business case
- An open mind regarding interests
- An equal sense of urgency

Two of the four considered pilot projects are still ongoing. In the remaining two the process came to a standstill. Considering the earlier mentioned influencing factors, most of them are estimated in a positive way in Helmond. This project offers also the best perspective to exchange real estate. Although the fragmentation of ownership in Maasbracht is evident, most influencing process factors are negative. Here we have seen the process failed and readjustment did not succeed.

In all considered projects a certain sense of urgency is present among the owners, but also in all projects there is a distinguished feeling about the sense of urgency among the owners. Apparently there can be differences in the sense of urgency, for the projects of Helmond and Doetinchem are still going on, as long as all interests are taken into account.

Based on a pilot case in Woerden, the Dutch Cadastre made a simulation game in which readjustment can take place based on the headlines of the owner made vision. In December 2015 this game is played by stakeholders of urban land development in the Netherlands. The participants of the game gained a greater understanding of the process of urban land readjustment. During the discussion after the game the following conclusions were drawn (Jager, 2016):

- Start with options for the exchange of real estate that are most obvious;
- Face-to-face contact between stakeholders is very important;
- Stakeholders: be open about interests, motivations, ambitions
- Municipality: define roles and communicate your role clearly
- Appoint an independent process manager;
- A positive business case is a condition, take the local market into account;
- Exchanging real estate and exchanging tenure are to different things.

To conclude, one sees the appearance of some of the mentioned factors: openness about interests, the availability of an independent area director and a positive business case. The stimulating program of the Ministry of Infrastructure and the Environment encourages municipalities to share this kind of experiences by creating a community of practice involving the pilot projects selected by the program.

Beside this, one sees also the different roles of the municipality mentioned. This appeared to be an important factor in the Brainpark project, too.

The main question in stimulating urban land readjustment seems to be: how can one manage the sense of urgency to the individual owners in such a way they begin to act? One part of the question is: take all interests of all owners into account. An independent area manager has an important role here. The other part of the answer is that the individual business case of each participating owner has to be a positive one. This can be reached by increasing the deliverables or reducing the costs. Stimulating urban land readjustment has to focus on this aspect.

We mentioned six influencing factors which help to make urban land readjustment successful. When starting a project in urban land readjustment one has to consider if the influencing factors on owner empowerment presented here, are sufficiently addressed within the actual case. And if not, how you can improve these basic principles in advance.

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## **BIOGRAPHICAL NOTES**

**Friso de Zeeuw** has since 2006 a part time appointment as Professor of practice at the Delft University of Technology in the field of area development. From 1998 until May 2016 he was also director New Markets at BPD, the largest project developer of the Netherlands. Friso de Zeeuw integrates knowledge and experience from different views, public, private and science, an extraordinary combination. Friso de Zeeuw has a Masters degree in Dutch Law, has been working as policy advisor at a municipality, organizational advisor at a consultant company and has been a governor at a municipality and a province. Friso de Zeeuw is still working as author, gives speeches, is advisor, performs as chairman or participant in discussion meetings on area development.

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**Tom Verbruggen** completed his major in landscape architecture at Wageningen University & Research. At the Radboud University Nijmegen he majored in spatial planning with a focus on real estate and land policy. He graduated from both universities in 2012. Currently he works as a project leader at the Dutch Cadastre in the field of urban and rural land readjustment.

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<sup>i</sup> The Netherlands have a negative land registration system. This means the land owner in the land register is not necessarily in all cases the legal owner. The land register registers land rights based on the offered deeds. Owners are obliged to register the transaction deed. But ownerships can also be legally acquired without a deed, for instance when someone possesses land for many years while he behaves like the owner.