

se dear Amsterdammers,

It has been four years since we started the Startup in Residence Programme. A programme with the aim of making "procurement" of products and services by the municipality / government more accessible for small parties and to boost the start-up ecosystem. The programme has seen tremendous growth and development since its inception. Something to be proud of, because the effect of the programme on the organisation(s) is significant.

We have contributed to a different way of procurement. We have helped colleagues to work in different ways, to think differently about their work and to develop pilots, products and services together with (small) market parties.

Our work is not done. The Startup in Residence program is a first step in collaborating with smaller parties. The next step is to make this way of working and procuring the "new normal" by improving the accessibility of procurement as a whole. Not only for startups but also for scale-ups, SMEs, social entrepreneurs and other initiatives.

We are grateful to everyone who helped us reach this point. We are happy to pass on our learnings and insights to you.

Enjoy reading on behalf of the entire Startup in Residence team,

Minouche Cramer Founder SIR and Startup Officer Amsterdam



Dear Startup in Residence family, dear colleagues, dear interested people and of cour-

Preface

Amsterdam is growing fast. This creates social challenges that we want to tackle responsibly. The municipality cannot do this alone.

By collaborating with young and innovative start-ups, creative and smart solutions are devised for urban issues, for example through the development of new and innovative tools. That is what our Startup in Residence programme is based on.

Startup in Residence is a six-month training programme for startups and entrepreneurs. Participants work together with clients from municipal organizations who deal with the social challenges on a daily basis. They receive guidance from professional mentors and access to a large pool of knowledge and expertise. The municipality makes office space available and the entrepreneurs can execute pilots in the city to test new solutions. The intention is for the municipality, at the end of the program, to become the "launching" customer in the event of successful collaboration, to encourage use or to help the startup further with its development.

In the editions of the programme so far, 34 startups were supervised and with 23 of these startups Amsterdam still works together. For example with the startup Mijn Buur which has developed an app for neighbours that increases mutual social cohesion. Via the app, neighbours can easily help each other and together make the neighbourhood better.

But Amsterdam also works with, for example, Global Guide Systems, which tracks fleet movement on the canals, and with the start-up WASTED that rewards residents with points for returning bulky waste, that can be exchanged for goods and activities at local businesses. Other software and hardware products have also been tested in the city, some of which are still applied or currently being developed and implemented.

The Startup in Residence programme thus offers the possibility to successfully experiment and test products at an early stage in order to reduce the additional risks of purchasing products or services. In addition, we help develop or attract innovations that keep Amsterdam liveable.

Nineteen other municipalities, provinces and ministries throughout the country have been inspired to set up a similar programme and to experiment themselves. That is something I am proud of.

After three successful editions, a fourth edition coming to a close and a fifth that just started, it is time to take stock of the situation. This report is about the impact of the Startup in Residence programme on the city and the lessons learned. What has been achieved? What more can we offer our residents? Which innovative products and services have been developed?

The insights are also shared: what does it mean to be a public incubator? What were failures and what were the successes, and why?

All this serves to further increase our impact in the coming years, with the aim of creating a liveable city for our residents.

Enjoy reading and learning!

Udo Kock Wethouder Economische Zaken



Management Summary

Startup in Residence

The Startup in Residence programme brings together the worlds of startups and government. It connects startups and scale-ups with key social challenges in the city in order to stimulate innovation. The programme invites both Dutch and international entrepreneurs to tackle these challenges in collaboration with the (local) government. These smart and creative solutions benefit the city as well as its citizens. After three successful editions, a fourth currently running, and preparations for a fifth and sixth edition in full swing, it is now time to look at the impact we made. Do we achieve our goals, and are we still doing the right things?

Facts and figures (2015-2018)

Since the first edition in 2015, 51 challenges were formulated on themes such as sustainability, mobility, circular economy, healthy city, digital city and public urban space. In total, 340 startups applied and 34 startups were selected and awarded participation in the incubation programme. Together with more than 70 civil servants, these startups tested their idea and prototypes, and used the results from pilot experiments to further develop their solutions. The municipality currently collaborates with 16 of the 27 alumni startups in various forms of public-private partnerships.

Innovative procurement

Within the rules that apply to public tenders, we succeed in making the purchasing process accessible to young innovative companies. Our method of tendering makes it possible to test and validate ideas and prototypes from an early stage, thereby reducing purchasing risks. With great commitment, at least 19 other governmental bodies throughout the country - 12 municipalities, 5 provinces and 3 ministries - have been inspired to set up a programme and start experimenting as well. The Startup in Residence "family" is growing steadily, allowing even more innovate partnerships to take shape.

Co-creation between startups and civil servants

An important part of the programme's impact is the qualitative change it brings about within the municipal organisation. We see that participation in the Startup in Residence program stimulates civil servants to approach their challenges in an innovative way. It helps them to sharpen their questions, identify the main features the solution requires, and experience the "build-measure-learn" approach in practice. From their roles as clients, civil servants take valuable experiences with them into other activities. Slowly but surely, co-creation with innovative partners in the city becomes a new way of problem solution. However, for this to become "business-as-usual", even more support and mentoring are required before, during and after the incubation period, strengthening the culture of collaboration.

Recommendations: towards a "new normal"

The question of impact offers us the opportunity to share our lessons learned and look ahead: how can we further develop the programme and method, learn from our experiences so far, and work towards innovative procurement as a "new normal"? Based on the research carried out, three recommendations are made:

- 1. Scaling-up: in order to achieve an even more collaborative government, "collective clientship" should be encouraged among more and diverse partners regionally and nationally. In addition, there is great potential in including semipublic and private organisations as clients in the programme.
- 2. Thematic focus: by organising the upcoming programmes around one theme at a time, an optimal combination is made between content and process, and allows us to collaborate with existing expert networks. The thematic focus will increase the applicability and impact of the smart solutions we develop.
- 3. Facilitate an infrastructure for co-creation (purchasing platform). If we truly want to stimulate co-creation between partners in the city on all major social challenges, we must facilitate the match between supply and demand of innovation. For this we develop a purchasing platform where government and businesses can find each other and start collaborating.

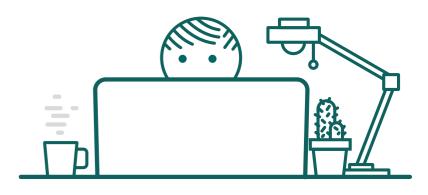
'In order to innovate, we must do things. We must experiment, learn, dare to fail, and talk and communicate about it. Within the city of Amsterdam, this way of working has already created a whole new dynamic. At this point, nobody in the municipal organisation doubts that we need to centralise the question when we purchase products or services, and that we must focus on the people who are going to put these to practice. We feel we can be innovative in how we approach problems and in whom we involve in building solutions. Startup in Residence offers the government the chance further disseminate this way of looking at things. I am convinced that it is a huge opportunity.

Ger Baron, Chief Technology Officer, municipality of Amsterdam

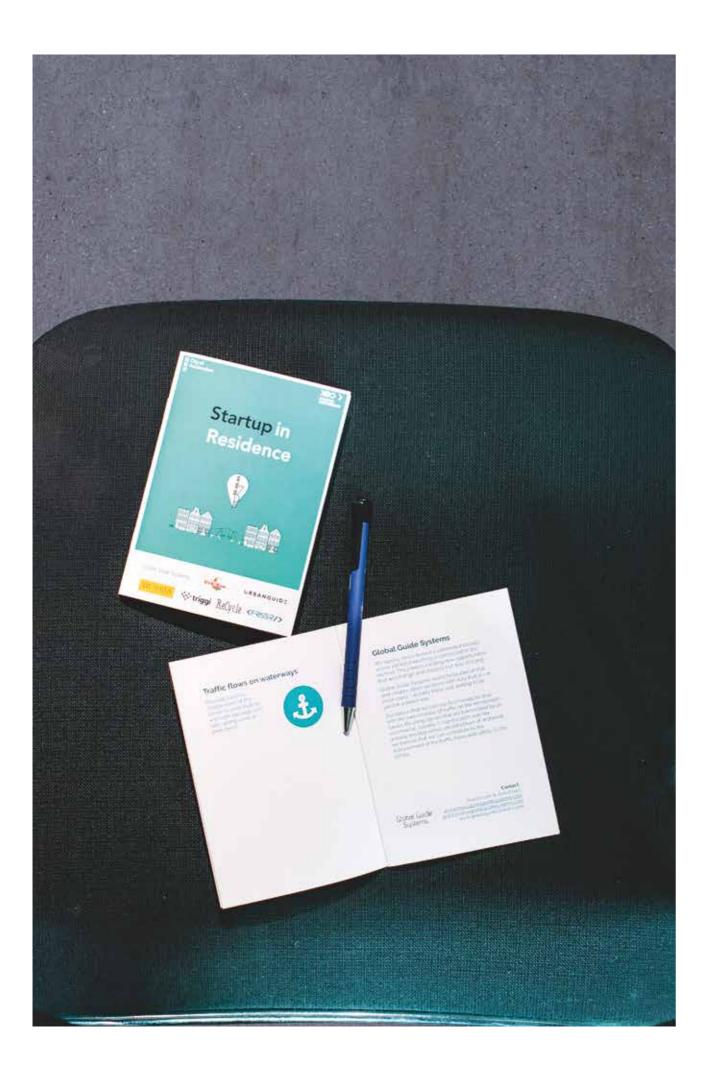


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1. The Startup in Residence Programme

Who we are

Amsterdam is a pleasant, liveable city where residents, businesses and visitors can feel at home. In order for this to continue, the city of Amsterdam tries to anticipate and address technological, social and other developments. To explore innovative solutions and their impact on the city, the municipality of Amsterdam founded the CTO innovation team. The CTO innovation team collaborates with all departments from the municipality to make innovation happen in the city; it works on many different themes, such as smart mobility, vitality, circular economy, energy, digital city and urban development. Its goal is to improve the quality of life of the residents of Amsterdam. This includes both the municipality's internal organisation and the services it provides. The CTO innovation team's projects result in the redesign of organisational processes and the development of new ICT facilities, but most importantly, they lead to experimenting with new technologies and solutions co-created with different partners.

StartupAmsterdam, a vision and action programme of the municipality and its startup community, aspires to make Amsterdam the prime location for startups in Europe. Its aims include encouraging more international startups to opt for Amsterdam accelerators and incubators and to base themselves in Amsterdam. The programme also promotes collaboration between public and private sector organisations with the intention of stimulating distinctive startups and entrepreneurship. StartupAmsterdam is centred on strong partnerships with a clear focus, cohesion and transparency in the startup ecosystem.

Startup in Residence combines these goals in a government incubator/accelerator programme, in which the city can act as an investor or launching customer.

Why Startup in Residence?

In general, city governments have little room and incentives to become early adopters of technology with high or relatively high financial risks, preferring to wait until a technology has been tried, tested and proven. In this light, municipal bodies are typically restricted by low-risk procurement channels in addressing their city's issues, leaving innovative and eager entrepreneurs feeling detached from municipality tenders.

In practice, a noticeable gap has emerged between the aims of the government and the tech innovation sector, where the needs of modern cities were not in line with public policy and procurement, and where potential bridges were not being built. At the same time, many young innovators who were focused on the development of city-serving products and services that address social challenges lacked the technical and theoretical know-how to gain access to public procurement workflows and cooperate with the government. How could the city of Amsterdam accommodate for the disregarded early-stage companies, whose potential to improve life in Amsterdam is vast? It adopted the strategy of connecting parties from the public and private sectors and began positioning itself as a facilitator of a flourishing tech ecosystem. To this end, Startup in Residence was developed.

The idea of a 'residency' was inspired by the municipality of San Francisco, which set out to stimulate entrepreneurship by inviting entrepreneurs to work within the city government. Motivated by this idea, Minouche Cramer, SIR founder and Startup Officer Amsterdam, opted to tailor the programme in Amsterdam specifically to startups and other young innovative companies offering smart solutions. This in turn inspired San Francisco, which then adopted the same format. As will become clear, this was just the beginning of the SIR 'family' which has been growing ever since

How it works

For the Startup in Residence programme, international and Dutch startups are invited to develop creative and viable solutions to specific urban and social challenges faced by Amsterdam and its inhabitants.

These often concern problems that are related to other societal issues and systemic structures, which cannot be tackled in isolation but require in-depth analysis and contextualisation. This might be an issue in the social domain, such as how to reduce loneliness, but it may also concern something more practical, such as household waste separation and recycling behaviours. Each year we also offer a wildcard, inviting startups to propose a challenge they believe the city is facing along with their solution to it.

Participation in the Startup in Residence programme is open to startups, scale-ups (in the starting phase), social companies and small innovative companies. We use the term 'startup' as an umbrella term for all these types of business. A number of selection criteria determines whether companies are eligible for participation in the first place (see box 1). After that, a list of assessment criteria is maintained to evaluate the startups' proposals. This assessment concerns the startups' vision and mission, the impact their proposed solution will have on the city and the feasibility of realising and implementing their concepts. The criteria are published in the tender and on the website before the start of the programme; for a full list see appendix on page 80.

Selected startups go through an intensive six-month in-house training programme (see box 1), with the support of mentors, businesses and experts from the public sector. Additionally, the municipality grants the startups access to its vast network and its partners, providing incubation opportunities (such as workshops, professional mentoring, peer-to-peer learning, a workspace and access to startup events) and the chance to conduct pilots and validate their products within the city. If a solution proves successful, the municipality can invest in the startup or become its launching customer or partner, thereby kick-starting their careers and helping them scale within the public sector. It is important to note that there is no linear or uniform trajectory we can stick to; each challenge brings with it a unique process of experimentation.

Our goals

To summarise, the ambition of the Startup in Residence programme to stimulate public-private co-creation translates into three specific goals:

- 1. Smart solutions for the city and its residents
- 2. Facilitating innovation in the municipality
- 3. Enabling innovative procurement

In the following chapters, we will explain how we do this, what we have learned so far and how we will continue.

Box 1: What is a startup?*

1. The business must not have been registered with the Dutch Chamber of Commerce or a similar chamber in its country for more than five years;

2. The business must consist of natural persons or a legal entity;

3. If the business consists of a legal entity, the business must have no more than ten salaried employees;

4. The business must not be a startup that has originated from another business that has 250 salaried employees or more.

5. The business must not have contracted any subcontractors;

6. The business must own an MVP/ prototype/beta version;

7. The business must not yet have paid customers for the product provided as the solution. The City has the intention to become launching customer with the Programme;

8. Startups must be able to align their features set with the market situation. We expect the business to be flexible and open to adjustments.

* These criteria change over time. Already we noticed that our definition of startup has changed throughout the year, it is a dynamic definition. In the near future, we also want to open up our focus beyond just startups, and include scale-ups, innovative SMEs and social enterprises.



It is important to explain

what we mean by 'impact', which impact we are talking about and how we went about measuring ours.

2. Let's talk about impact

After completing three editions of the Startup in Residence programme in Amsterdam (SIR Amsterdam) and inspiring at least 19 other governmental bodies (municipalities, provinces, ministries) to participate in a programme (see page 48), it is now time to take stock of our impact. This means looking into what the programme has achieved for a variety of public, private and civil stakeholders over the years. But it also means reflecting on our own experiences, successes and mistakes: what have we learned along the way?

With this first impact report we share our insights about the intended, unintended, expected and unexpected results of the programme so far. But before we do this, it is important to explain what we mean by 'impact', which impact we are talking about, and how we went about measuring ours. Toward the end of the chapter, a reading guide is provided, indicating what you can expect to read in the pages to come.

So what do we mean by impact?

Impact is a term that we hear more and more in the fields of social innovation and sustainable development: impact-making, impact measurement, impact investment or social impact bonds. This is, in our eyes, a positive trend: in each case, 'impact' is about making a positive change to the world we live in. But at the same time, the broad usage of the term makes it difficult to know exactly what we mean when we talk about 'impact'.

Luckily, the field of impact assessment is quickly maturing. With open-source toolkits and a common language, creators of change are encouraged to start measuring their impact and sharing their insights. One basic definition underlies the majority of methods available: impact is that part of the change that can be attributed to your organisation. For any organisation - public or private - knowing your impact means knowing what your activities result in for the stakeholders involved. Not just in economic terms, but also socially and/or environmentally. Once you know this, it becomes possible to gauge to what extent your organisation is reaching its broader ambitions and, ultimately, to manage this.

Impact for us is not about the question 'does it work?' but rather, 'how does it work?'. It is about identifying the 'active elements' of our activities and knowing what these will lead to in the long run: how do we get from today's challenges to the future we desire? What steps lie in between?

Want to read more about impact?

'The Impact Path' by Social Enterprise NL, Avance Impact & Erasmus Impact Centre (2018)
'Theory of Change thinking in practice' by Hivos (2015)
'Maximise Your Impact' by Social Value UK (2017)

Three impact principles

In recent years, consultancies and experts have made a variety of models and methods available that startups, social entrepreneurs and programmes can use for measuring their impact. Even though each method comes with its own design and emphases, they all start from three simple principles:

- 1. Impact measurement starts by formulating your impact goals or ambitions.
- 2. For each impact goal there must be a so-called "Theory of Change".
- 3. Impact management is a learning process that matures over time.

We agree, and so we take these principles as a jumping off point; not just to bring into vision the impact of the programme in general, but also to start exploring the impact of the startups on the individual social challenges in Amsterdam (see chapter 11).

1. Startup in Residence impact goals

So what are our impact goals? As is explained on page 10, the programme's ambitions span three main areas: smart solutions for the city and its residents, facilitating innovation in the municipality and enabling innovative procurement. This means that our impact should be studied in all three areas as well. To get started, we formulated a research question for each of the programme's ambitions:

- Smart solutions for the city and its residents:
- To what extent does the collaboration between startups and civil servants propose suitable answers to Amsterdam's challenges - what has been done so far? What can we expect to see next?
- Innovation in the municipality:
- What is it like for civil servants to work on urban challenges in this way? Which spillover effects can we observe throughout the municipal organisation and in other governmental organisations?
- Innovative procurement:

How does the programme enable participation in public procurement procedures for startups and other small companies? What is needed to further improve this?

In order to answer these questions, we conducted interviews with startups, civil servants, mentors, team members and other stakeholders. These qualitative findings are supported by quantitative data - facts and figures - and together these reflect the scope of the programme so far. This is complemented with our observations and reflections from the past few years.

2. SIR 'Theory of Change'

A Theory of Change (ToC) is a comprehensive and logical narrative about the assumed effects of an organisation's efforts. It is a model that visualises how and why a desired change is expected to happen; it explicitly deals with the causal relationship between activities, outputs and effects. Based on the threefold ambition of the Startup in Residence programme, we have formulated our own ToC. We've made sure to include the four elements every ToC should have: stakeholders, activities, outputs and (direct and indirect) results. A simplified version is presented on page 16. If read from bottom to top, it shows how we think our activities will eventually lead to a more innovative city.

3. Impact management as a learning process

As this is our first impact report, we try to be modest about its the scope. It is not a fully fledged impact measurement or a complete description of the result of every activity we have undertaken. Instead, it should be seen as an impact roadmap: a way of sharing what we do and why we do it, what this has resulted in so far, how we build on these experiences to figure out where to go next and how we plan on getting there. As such, it is something to work from and come back to regularly: to check whether we are still on track, and to see if we are still doing the right things to reach our goals.

Reading Guide

In this report, it is our aim to be reflective and adaptive. We are experimenting with what works and what doesn't, so that ultimately we can measure and manage our impact in the most effective way.

four themes:

The programme

How is the Startup in Residence programme organised (chapter 1) What is needed for public-private co-creation from each party involved? How do we facilitate this (chapter 3) How do we make the procurement process accessible for startups (chapter 4) What are the reasons for startups and civil servants to join a government incubator (chapter 5).

Co-creation

What spillover effects do we see throughout the municipal organisation (chapter 6) What does it mean for startups to be 'in residence' at the municipality of Amsterdam (chapter 7) What are the key values for a culture for collaboration (chapter 8).

Results

Which other governmental organisations are part of the SIR family (chapter g) What are the facts and figures of three years of SIR (chapter 10) What can we say about the impact of the startups on the social challenges, now, next and in the future (captured in six impact roadmaps - chapter 11).

Moving forward

What are the key learning goals we take with us into future activities (chapter 13) And finally: what are our plans for the years to come (chapter 13) We end the report with our concluding remarks (chapter 14).

with a form of craftsmanship: it is the will and drive to learn



Because the impact of Startup in Residence is so diverse, there is no single format in which we can present our findings. To provide some structure, however, we have categorised the findings into

You can compare the programme continuously and collaboratively.

Table 1: Startup in Residence Theory of Change

Indirect effects	Innovative solutions reach and benefit the people of Amsterdam	Startups, scale-ups, innovative SMEs and social enterprises have access to procurement processes of the local government	Civil servants increasingly work together with smaller partners that offer smart solutions Civil servants approach problems/challenges in an innovative way, developing a new kind of business-as- usual		Demand-driven procurement lowers purchasing risks and increases development of innovative solutions	
Direct effects	The people of Amsterdam partici- pate in the validation and development of products and	Public-private partnerships in various forms: cooperation agreement, license agreement, frame- work agreement and purchase agreement. Besides that, startups and the municipality find other forms of exchange and cooperation (knowledge and data sharing, access to networks, exposure, strategic advice).				
	services	Startups better understand how they can work with the municipal organisation	Civil servants are familiar with an agile way of thinking and working and integrate this into their activities		In case of a successful pilot the municipality can decide to purchase the startup's product/service.	
1		Startups develop, test and validate their solutions in the city				
Output	Target groups are key stakeholders in the design and validation of smart solutions	Startup and clients, alongside their Startup in Residence mentor, define and log the scope ar deliverables of the six-month collaboration				
	The people of Amsterdam are considered key stakeholders in			Civil servants ar 'Startup 101'	vants are trained in 101'	
	the challenge definition	ne challenge		Clients attend regular meetups		
		Based on selection and assessment criteria, startups are matched to a challenge and awarde six-month incubation programme				
1	Startups apply for participation Civil servants de challenges and clients			Lean procurement procedure: Startup in Residence Request for Tender		
Activities	Startup in Residence inv entrepreneurs to tackle in collaboration with the Smart solutions are devo residents of Amsterdam	Startup in Residence invites civil servants to formulate a challenge and define criteria (question behind the question)		Startup in Residence develops a lean tendering procedure in order to request solutions for key social challenges		
Stake- holders	Residents of Amsterdam	Startups, scale-ups, innovative SMEs, social enterprises	Civil servants		Municipal procurement	
1		Municipality of Amsterdam				



3. Public/Private **Co-creation**

At Startup in Residence we invest in building long-term relations between the worlds of startups



The process of co-creation between public and private actors is a key aspect of the Startup in Residence programme. We are convinced that when there is true collaboration and exchange between these two fields, innovation can translate into real results which benefit both the city and the people of Amsterdam. But what exactly do we mean by co-creation, and what does it look like in practice?

period and afterwards.

At Startup in Residence we invest in building long-term relationships between the worlds of startups and civil servants. Rather than following a blueprint of activities, agreements and deliverables in order to achieve quick outputs, we work towards finding relevant and durable solutions for the social and urban challenges at hand. The programme is designed in such a way that ideas and products are tested and validated often and from an early stage. This makes it possible to work quickly and thoroughly at the same time: what works? What doesn't and why? How can we improve it?

To give a better idea of what this means in terms of collaboration, we present the illustration on the next page. It demonstrates the entire Startup in Residence process, plotted against the programme timeline. It offers insight into how we think our activities, inputs and outputs translate into the aspired outcomes. In other words: it reflects our vision and mission, or "Theory of Change" (see page 16). It is evident right away that co-creation between startups and civil servants is not a straightforward process. Quite the opposite: it is fickle, iterative and open-ended. Yet to facilitate a basic structure to this process of collaboration, we make sure to facilitate four key phases best we can. Let's go through them one by one.

The past three years have been incredibly valuable for us in term of learning what co-creation can and should be about. So far, we have welcomed 34 startups into our programme (34 alumni startups and 7 currently enrolled). This means that we have witnessed a great variety of collaborative action between public and private actors. If anything, these 34 'experiments' in public-private co-creation have taught us that such action comes in many shapes and forms and is difficult to structure in advance. On the other hand, we have learned what conditions must be in place for a true exchange of ideas to occur and how we can facilitate this throughout the incubation

Public/Private co-creation The Startup in Residence programme





The Challenge

The Match

The Pilot Phase

The aim of Startup in Residence is to stimulate innovation in the market. Rather than asking for a ready-made fix, we search for innovative solutions for challenges in the city that we may not have thought of at all. An important first step in this process is of course the collection of these challenges among our colleagues. What are issues for which they have not seen a fitting solution yet?

Next, we discuss their contributions in order to see if they are a right fit for the programme. Together we "open up" the issue they bring in order to find out the real pain behind it. Often we see that it is the question behind the question that actually requires a solution. More of than not, these questions concern more than one municipal department. This opening up is an important preparatory step because the challenge owners, the civil-servants- as-clients, will be in charge of their challenge during the entire programme. A sense of ownership is encouraged at an early stage.

The final challenge definition is a matter of balancing specificity and generality. This is always a trade-off: the more concrete the challenge, the chances of a better from the market are bigger, but the chances of finding them are smaller. At the same time, the challenge posed has to be open for innovative solution, with room for creative input and experimentation, increasing the chances of profound innovation. There is no single recipe: it requires learning by doing, and flexibility from all parties along the way.

· We address wicked problems.

- We tease out the question behind the question.
- The challenge definition must allow for various solutions.

The selected challenges are bundled in a European EMVI tender (see chapter XX). The enrolling startups are assessed by a group of professionals with relevant expertise (e.g. the civil=servant-asclient) and experience in entrepreneurship and innovation. This committee selects the startup that is allowed to work on the issue with the client.

After its selection, the startup is linked to a mentor. A Startup in Residence mentor is different from those at other incubators and accelerators: each mentor commits to a process jointly with the municipality and startup for at least six months. A mentor coaches the startup on entrepreneurship, on topics such as team composition, testing assumptions or preparing for future business prospects. We have learned that the quality of the mentors greatly affects the quality of the programme.

In addition, mentors are responsible for a biweekly update to the programme team and a timely signalling of delays in delivery or other sources of friction within the collaboration. Lastly, they are concerned with securing a healthy degree of autonomy for the startups, so that their business does not become overly dependent on government contracts. A mature value proposition is also what allows startups to scale faster after the programme.

 A professional committee assesses the match between startups and challenge. • A qualified mentor supports the startup (and client) for at least 6 months.

The six-month incubation period consists of a number of phases: the deep dives, the training programme and the pilots. Throughout the residency, these often overlap, alternate and are repeated. The Startup in Residence programme team facilitates this process by managing expectations, setting boundaries and encouraging commitment.

The Deep Dives

After the matchmaking process and before the programme kicks off, all parties involved must develop a profound understanding of each other. The startup (and mentor) must get to know the problem thoroughly, including the actions the municipality has already undertaken regarding the topic. At the same time, clients have to get to know the startups and their proposed solutions really well. This acquaintance takes place through 'deep dives': recurring sessions in which the mentor, startup and client explore in-depth both the challenge and the solution offered. Together, we create a timeline, set expectations and indicate milestones. A solid basis is established for the six months to come. We make sure that everyone involved is aware that participation in the programme is not without obligation: the plans we make are documented and logged. In practice, these are dynamic documents: during the programme, we come back to the notions and agreements, and make adjustments as ideas are tested and plans evolve. As such, the deep dives form a common thread throughout the (potentially long-term) collaboration.

The Training Programme

Throughout their residency, startups are offered an intensive in-house training programme. The trainings cover all the "startup basics" that must be in order for them to further develop their business, including: the lean startup method, customer journeys, basic finance and legal structures, governance and growth strategy. The trainings are provided by professional trainers, coaches and entrepreneurs, and are tailored to the business cases of the enrolling startups where possible. One of the most important trainings of the incubation period is 'Municipality 101'. In this training, startups learn how the municipality works, what departments it operates and how decisions are made. We make sure a stakeholder overview is in place for each challenge, and startups receive individual assistance on selecting who else they might need to work with within the organisation besides their client.

For the clients, we offer a training dubbed 'Startup 101', in which they learn how to think and work like (and with) a startup. They learn how this requires a different approach towards problem solving, such as testing key assumptions as quickly as possible and keeping the end user in mind at every step. They are introduced to working iteratively, according to the startup adagio of 'build-measure-learn'. The training is provided by enthusiastic professionals and inspires clients to open up and think creatively. It is also an opportunity to introduce them to startups that have participated in earlier editions.

The Pilots

To achieve the deliverables agreed upon in the deep dives, startup, client and mentor together design the experiments for the pilot phase. This means defining what will be developed and tested, what is required in order to execute this (expertise, network, resources), and what successful outcomes will look like. The pilot execution that follows is based on the three principles of 'build-measure-learn'. By working in short cycles, the prototypes of the solution are validated. This involves optimising the customer journey and testing among the intended user (the residents of Amsterdam or civil servants), gradually increasing the scale of the experiments.

- In Deep Dives sessions, the startup, mentor and client get to know each other
- The programme team has a continuous facilitating function.
- and signed by all parties.



The Impact

Agreements and milestones are logged

Toward the end of the residency, startup, client and mentor evaluate their collaboration. If the product or service proved successful, the scalability of the solution can be explored. If the client is satisfied. the municipality may decide to purchase the solution and become the startup's launching customer, thereby kick-starting their career.

While it is the municipality's intention to act as a (launching) customer, successful collaboration can take various forms in practice. The co-creative process may result in a formal contract (cooperation, license, framework or purchase agreement), but the partnership can also be more supportive or strategic (see page 50 for a list of possibilities). Another possibility is a further round of testing by scaling up the pilot in order to make sure the solution works.

Each partnership or collaboration develops continuously. Startup and client make sure they continue to 'build, measure and learn' in order to optimise the solution or to further develop their knowledge and network. In other words: startup and client together increase the impact. To facilitate this, the mentors and programme team remain available for consultation and mediation. Alumni startups continue to be supported and at the same time, they support us. We often invite startups to join the programme team on network events and conferences, to introduce their products and services to potential partners or clients, and to share their experience of participating in the Startup in Residence programme to inspire others.

- Successful collaboration and partnership between startups and clients comes in various forms.
- · Alumni startups continue to be supported after the incubation period.

4. Innovative Procurement

In order to encourage co-creation within the city, Startup in Residence has developed an innovative approach to public procurement. Our aim is twofold: on the one hand, it's to make the process of public procurement accessible to a variety of innovative entrepreneurs, and on the other hand to allow for more smart products and services to be purchased by governmental organisations. For this, we have undertaken several steps in order to make the legal procedures of procurement more inclusive for young innovative companies (startups and scale-ups). It's important to note that we do not alter legal structures, but rather seek room for manoeuvre within the rules that apply. In the following paragraphs, we will explain why and how we did this and what we have learned from it.

Why innovate public procurement?

³ TenderNed provides an overview of all European tenders: www.tenderned.

nl. Each contracting authority is

obliged to publish its tender there.

However, they are not obliged to continue to use TenderNed for

and accessible to other systems

that are authorised by a contracting

authority. The contracting authority may publish announcements on TenderNed through other systems. The

systems that are linked to TenderNed

are called tSenders. The following tSenders are known to us: Aanbe-

stedingskalender.nl, Bouwberichten

nl, Commerce-hub, CTM Solution,

Esize, Negometrix, Nétive VMS BV, PROACTIS, Tenderplus, Tenderquide

⁴ See 'Why startups don't bid on government contracts' by Boston

Consulting Group for an exploration

of startups' reluctance to participate in public procurement processes

⁵ For the most recent version of our lean tender, visit the website. The

amsterdam/media/sites/2/2017/07/ Request-for-Tender-SIRA-3-0_final.pdf

2018 version can be found here:

https://startupinresidence.com/

(based on similar conditions in the US).

The Solutions Factory.

registrations. TenderNed is fully public

The municipality of Amsterdam has a total procurement expenditure of €1.97 billion per year (2017). This is spread over 21,000 suppliers, the vast majority of which are small and medium enterprises (SMEs). SMEs are companies with up to 250 employees. When we talk about young innovative companies, we refer to small companies that supply innovative products or services, usually with the help of new technology, with the aim of scaling up as quickly as possible, preferably internationally. In other words: startups and scale-ups. How much the municipality buys from these small companies is unclear, but the estimate is very low.

Amsterdam strives for innovation in its own products and the services it provides for its residents – the Amsterdammers. With its procurement policy, the municipality can have a significant impact on existing, emerging and new markets. At the moment, the procurement policy is mainly aimed at parties larger than startups or scale-ups and few tenders are formulated with innovation as an objective. In addition, for smaller parties the purchasing process is unclear and therefore hard to access. They often have no idea how a purchasing process works, what TenderNed is and what their rights and obligations are. Put simply, for small parties, bidding to a government contract is generally unappealing : it demands a substantial investment of both time and funds, while attempts are rarely successful in practice. As a result, the city of Amsterdam is missing out on innovations.

The 'Startup in Residence Request for Tender'

To enable the city of Amsterdam to use procurement as a tool for innovation, purchase innovative products and promote the municipality as a launching customer, we needed to do things a bit differently. Supported by the Amsterdam procurement team, we designed a 'lean' version of the regular European tender: the Startup in Residence Request for Tender . This document, containing ±30 pages instead of the regular 130, presents a simpler approach to existing procedures. It offers a guideline for contrac-

Important to note right away is that we do not alter legal structures, but rather seek room for manoeuvre within

the rules that apply.

ting authorities, including specific selection criteria for startups, and special clauses that allow the city to minimise risks associated with the innovation sector. Moreover, the lean tender uses less judicial jargon without losing any of its legal validity.

In the table below, we compare the Startup in Residence Request for Tender to regular procurement processes:

Table 2: Comparing the lean SIR tender with regular procurement

SiR procurement

Regular procurement⁶

- Tender
- The document counts ±30 pages and the language used is clear and simple, written for the layman;
- We ask for smart solutions, not finished products or services.
- Each SIR edition has one tender, which combines the different challenges as 'lots'
- We place the tender on TenderNed, but also on our own website. Through this, we reach a broad range of entrepreneurs and creative minds
- The criteria are formulated to encourage and secure innovation, feasibility and scalability;
- The criteria are formulated in general terms, leaving room for divers solutions;
- We assess the bidding parties according to, among other things, their proposed impact on the city, the municipal organisation and the people of Amsterdam
- What is awarded?

Selection &

assessment criteria

- · Selected applicants are awarded participation in the incubation programme, (incl. training programme and the opportunity to test and validate their concepts).
- · Because the challenges have been tendered, the municipality can decided to purchase in case of satisfying co-creation.
- The city is under no obligation to act as a launching customer if the selected startup is not, or only partially, successful at solving the challenge.

- Documents can count up to 130 pages and are written in a highly technical, judicial language;
- Requests are often very specific as the solution is already devised. Most tenders include a list of detailed specifications that the product or service must meet.
- Tenders are often only placed on TenderNed, This is a complex system, offering few tools for parties unfamiliar with procurement methods.
- The criteria are often aimed at achieving a competitive deal
- When quality (not cost) is the key concern, standardised criteria are maintained: a logical action plan, detailed planning & budgeting, clear deliverables.
- A tender is relevant only to (large) parties in a specific domain or profession with a proven concept, offering a limited range of options to commissioning organisations.
- · Winning parties are awarded with a directly paid order and an agreement that is already largely established.
- The size and duration of the 1,7641,764 contract is usually established beforehand, but there are some exceptions.
- Recently, a new tendering proce dure was introduced that links the pre-commercial phase with the commercial one: the innovation partnership. This procedure is designed to enable collaborative innovation between the public and private sector. At this moment, however, there is no jurisprudence about the application of this procedure yet.

The benefits

⁶ Please note that there is more than one tendering procedure available. For an overview (in Dutch) see https://www.pianoo.nl/en

⁷ See the article on innovation partnership (innovatiepartnerschap) on the website of PIANOo (in Dutch)

lenges that the city is confronted with.

Besides opening up procurement to startups, scale-ups, innovative SMEs and social enterprises, we support these companies in learning about the world of governmental procurement. Within the incubation programme, they receive (mandatory) training in procurement and legislation. The idea is that with this knowledge, they are better equipped for scaling up within the public sector and/or bidding on governmental contracts in the future.

Challenging the status quo

In 2014, when Minouche Cramer first spoke with the lawyers at the municipality of Amsterdam's purchasing department, her propositions were met with some resistance. The majority of the judicial staff did not believe it would be possible to design a tender in this lean way. Yet, with the support of a number of innovation-minded colleagues, she managed to follow through and eventually convinced them it could be done.

We know from the ministries, provinces and municipalities that have been inspired to develop Startup in Residence programmes (see pages 47-49) that they encounter similar forms of resistance. But we also know from experience that most of the doubts can be taken away quite easily. In the box below our own legal counsels, Ayse Er and Anita Poort, explain how this works in practice, Q&A style:

Question 1 - What makes this type of procurement special?

Ayse Er: "The entire process has been dismantled; within the same legal frameworks we have sought room to implement the request differently, making the entire process more innovative. And because of this new way of requesting, we can also purchase more easily. It is special because it focuses on collaboration, jointly developing solutions, being a launching customer and really helping a company."

Question 2 - What is it like to convince procurement lawyers of this way of tendering?

Anita Poort: "As a legal counsel at the municipality's directorate of Legal Affairs working on our purchasing and contracting practice, I've experienced that people become tense when they have to organise a procurement. They seem to think that they have to go through a highly formulaic and bureaucratic process, they can hardly influence the outcome and they lose grip on time and planning. But in fact, rather than hindering projects, procurement can greatly support project development, provided that it is organised strategically. The Startup in Residence programme offers a concrete example: rather than seeing pilots come to a premature end because of lack of juridical and organisational strategy, the procurement is organised early in the process and issues of feasibility and scalability are discussed prior to collaboration between municipality and third parties so that durable solutions can be developed."

By lowering barriers of entry, the programme allows for the innovative ideas of young innovative companies to be introduced to civil servants. Because the product or service is still in a developmental phase and is tested in different pilots within the city, it can be tailored more closely to the needs of the municipality. The use of the latest technologies eventually results in more innovative solutions to pressing social chal-

Ayse Er: "Purchasers want to see before they believe. The idea prevails that the legal frameworks are so strict that there is no room to innovate. But as soon as we explain how we comply with all the rules, they are keen to apply it themselves. Purchasers are also often afraid that the selection criteria exclude too many parties, but if you look at selection criteria in other tenders, sometimes such strict requirements are imposed that there may only be a few eligible parties in the Netherlands or Europe, while in our approach every startup from anywhere in the world can participate. But the challenge lies not just with procurement officers; many of our colleagues at the municipality are used to ask for ready-made solutions instead of engaging in co-creation. As a result, they are often unaware of options for innovation in procurement."

Question 3 - How do purchasers deal with it in practce?

Ayse Er: "Selecting the right tendering procedure can be challenging. In Amsterdam, we chose the European tender, but each governmental organisation can select its own. While some have opted for subsidies or a contest, we believe it is not at all necessary to choose such a 'safe' option. What we see is that purchasers foresee a lot of roadblocks, which holds them back initially. But from experience we know this is mostly due to a shortage of information.

At first, purchasers can be very reticent, as they may be afraid that they have to do a lot of research and writing themselves. But when they find out that they can use our working method as a guide, they discover much of the work has already been done and has been tested without any problems occurring. We are, of course, more than willing to share our documents and insights. During the actual tender, purchasers themselves also see that the differences to regular tendering are actually quite small. After overcoming these initial concerns, and getting to know the startups, purchasers are generally enthusiastic and motivated to participate in subsequent editions as well."





5. Why join a government incubator?

In a time where private and public incubators and accelerators spring up all around us, startups have lots of options to choose from. That's why it is good to know what they need, what alternatives they have and what they are actively looking for. Or, in other words, why would startups join a government incubator?

Next, we want to know why civil servants choose to join an incubator programme. Participation in the Startup in Residence programme offers civil servants the opportunity to find solutions to key social challenges. By becoming a 'client' and collaborating with startups, civil servants are encouraged to open up their approach to problem definition and solution finding. For many civil servants, the emphasis on exploring and testing in the city means moving out of their business-as-usual frame of mind. We found out why by asking colleagues who decided to join us on this exciting opportunity.

"Put very simply, we had already applied for these kinds of tenders on TenderNed. And so we had experienced how difficult it was to participate in governmental projects and to gain experience within the government. We were aware of our business potential [...], but as a small company it is just very difficult to get in on your own. And then Startup in Residence came along, with a theme very close to us: finding a solution for the crowded canals, commissioned by the managing authority Waternet. That was perfect for us. Eventually we applied for it, not so much with the goal of quickly signing a contract, but purely in order to start building our track record in working with the government. That has been quite successful actually; so much that it has become one of our main projects. We have seen that this form of collaboration can open many doors, both nationally and internationally. The prospects for the future are great." Global Guide Systems (SIR Amsterdam 2.0)

Why startups join a government incubator:

A Access to the net

The majority of the startups involved in the Startup in Residence programme indicate that access to the network of the city is an important reason for applying. They expect that the programme will give them the opportunity to find the right people to talk to, encourage willingness for cooperation from civil servants and eventually open the door to building a track record in the public domain by having the city as a (launching) customer.

The programme positively contributes to this accessibility. Various startups mentioned that being 'in residence' at the city has made it much easier for them to introduce themselves to relevant partners and potential clients, to network and to plan meetings with decision-makers. Even in cases where they already knew who they needed to get into contact with, being 'on the inside' of the city made their efforts much more effective. (see more about 'being in residence' on page 37).

2. The opportunity to work on a social challenge

The specific set-up of Startup in Residence implies that the startups that are selected have a unique added value for the city. The Request for Tender is organised around social urban challenges put forward by the city. We ask startups to indicate which one

1. Access to the network of the city

they are applying for and how they believe they will fulfil the required criteria.

A key characteristic of the startups that participate in the programme is their social ambition. Rather than being focused solely on developing their own business case or closing a deal, it seems the participants are highly motivated to make a positive contribution to the city - whether it is reducing housing fraud, connecting vulnerable people to the right care facilities or increasing household waste separation.

3. The training programme and facilities

In addition to these motivations for joining, the startups consider the facilities offered by the programme to be very valuable for their development. During the six-month incubation period, the startups are offered workspace, professional training and entrepreneurial mentoring. The in-house training programme offers a broad palette of workshops that startups need to develop their company and continue to build their products. A professional mentor is there to give them strategic and entrepreneurial advice regarding their business case.

The opportunity to have offices at the city or one of its partners is also beneficial to the participants. Since it is not easy for startups to find affordable workspace within Amsterdam, this structure allows them to have a place to work from while testing their product in close collaboration with the city.

Why civil servants join a government incubator:

1. To 'scout' the market for innovative solutions

Civil servants are aware of the importance of a public-private collaboration. However, keeping up with the newest innovations is a fulltime job. Through SIRA, they can focus on the latest developments or best ideas from entrepreneurs, tailored to the issues they are working on right now.

2. To do innovative things, but not alone

Whereas some civil servants took part in more temporary experimental projects before participating in Startup in Residence, others described their department as relatively conservative and experienced little room to challenge the status quo. Both groups much appreciate the professional guidance and set up of the SIRA programme. It allows them to focus on the content, as the organisational structure is already taken care of.

3. To work in more innovative ways

An important theme among participants is the comparison between governmentas-is, and government-as-should-be. Civil servants feel responsible for their citizens, and by not only purchasing more innovative solutions, but also by consulting citizens as end user of products and services, they feel they are moving towards a more participatory and democratic type of governance. Innovation, then, is not only about the tools and technology used, but more about the social goals that they help achieve.

These key motivations for startups and civil servants for joining the programme correspond to our ambitions: encouraging collaboration between both groups and thereby fostering innovation in the city. In the chapters that follow, focus will be on the insights from the past years, the lessons learned and the challenges that lie ahead. Or, in other words, whether we can live up to expectations and whether we practice what we preach.

"The programme offers us a lot. Not just knowledge and expertise, but also the procurement process that is taken care of, and a way of working that we would like to apply in our own work as well. I think that is necessary, and we are still very much at the beginning of exploring how we can tackle this. A programme like Startup in Residence really helps us in this regard."

Department of Waste & Resources

"As a governmental body, we have to keep our goal in mind. We work for the people, the residents of Amsterdam, in order to make urban life easier, better, and more pleasant for them - whatever you want to call it. We have to keep that goal in mind, which means we have to monitor the progress to see if we're still headed in the right direction. I think that's important."

Department of Sports & Recreation

"The masterclasses are brilliant. They cover general topics, like crowdfunding and business models. I myself am an attendina radioloaist, so I know verv little about those things. It's just not my profession. It is really good that we learn more about these types of things - it's one of the main added values of the whole Startup in Residence traiectory.

KOPPL (SIR Amsterdam 3.0)



6. Spillover effects on the municipal organisation

Besides establishing whether civil-servants-as-clients have found solutions to their challenges, a key question for us is whether participation in the programme leads to so-called spillover effects throughout the municipal organisation. These spillover effects may take place at various levels: procurement procedures, policy description, inclusion of the end user in the design process, or perhaps, much more subtly, the daily engagements of the client.

Based on interviews with clients and other colleagues, we identified four categories of spillover effects: 1) cross-domain partnerships, 2) new methods, 3) experiments and 4) new 'energy'. This is not to say that these effects don't usually occur in a municipal context. However, participants explained that the programme has contributed to (re)focusing on these elements or has accelerated the process of incorporating them into their daily work life. A brief explanation of each effect may provide a better idea of what the programme brings about internally and its future prospects.

1. Cross-domain partnerships

The programme invites clients to enter into cross-domain partnerships in at least three ways. First of all, the municipality cooperates with external partners, including semipublic and private organisations, local initiatives and, of course, startups. Secondly, the programme actively encourages partnerships across municipal departments. One example is the challenge Energise Amsterdam! (SIR Amsterdam 3.0), which tasked the startup with developing a smart way to inform Amsterdam residents about sport facilities and activities. Although the challenge initially came from a city district, challenge ownership was shared with the central Department of Sports & Recreation - a form of collaboration that we don't see very often. Thirdly, traditionally, municipal departments are divided between the social domain and the physical domain. Several clients mentioned how collaborating with startups demonstrated that this division is more problematic than useful, as it makes it much harder and cumbersome to implement solutions that are spread across multiple domains (such as waste separation and participation, or physical space, health and social cohesion).

2. New methods

As mentioned before, by participating in the programme civil servants (re)discover new ways of working and handling problem solution processes. When asked about their experience of working according to the 'lean startup method'⁸, clients mentioned four key aspects they consider valuable for their work more generally:

Iteration

For many startups that develop software or other technology, working in short cycles or 'sprints' is very common, as it enables them to build a product quickly and test it intermittently. Several of the startups in the programme use this method, inspiring their clients to start validating ideas and plans much sooner than they are used to. Even though it may feel a bit uncomfortable at first, clients report that they were surprised by how much information they got at an earlier stage, saving the trouble of having to revise plans and designs later on.

Speed

The programme we offer is only six months long. According to civil servants, this is a very short time to develop an entire product. This motivates all parties involved to step up the pace, which means that decisions need to be made faster, especially on the government side.

• Experimenting

Clients mentioned that it's unusual how the Startup in Residence programme focuses on measurable results for continuing the partnership with the startup. In some cases, having practiced with measuring results in this experimental setting has changed their outlook on how to design other procurement processes as well.

• User-centric

The programme provides new ways for civil servants to employ user-centric techniques to provide better services for Amsterdam residents. They are closely involved in the pilots and in the development process of the startups so they also see the ways in which prototypes are tested in the city. This has inspired many clients to develop a more user-centric approach in general and sparked enthusiasm to get out of the office and into the city.

3. Experiments

Even though the programme is designed to enable long-term partnerships, during the six months' incubation period a lot of attention is put on the pilot phase. While this works like a pressure cooker in helping to find a good solution, it also inspires clients to take pilots more seriously in other projects. What we see is that they get used to the idea that a solution must be thoroughly tested before implementing it, or before purchasing large contracts with suppliers. This then becomes a mind-set they carry with them into new or existing projects in which they become more critical of what they are actually commissioning or where larger sums of money are at stake.

Next, the fact that Startup in Residence is a recognised entity and part of the CTO Innovation team of the city of Amsterdam gives challenge owners a mandate to work on more experimental projects that don't necessarily fit their job description. Lastly, the fact that the programme timeline doesn't take the planning of each and every department it works with into account can cause trouble for challenge owners, but also gives them freedom to work outside their traditional schedule. For example, in relation to the continuation of the partnership, the challenge owner below is wondering in which budget she should include the startup that she is working with. ⁸ Ries, E. (2011). The lean startup: How today's entrepreneurs use continuous innovation to create radically successful businesses. Crown Books.

"As city government officials, we are very good at making big plans, and suddenly it's one-and-a-half years later. But the idea of 'let's just get started', and working in short cycles – I try to incorporate this in my own work now, so that we can work faster. I do that by starting small, and just starting, instead of making too many plans, which is a trap I get caught in too often." **Department of Sports & Recreation**

"Really, the focus on 'getting out of the building', as it's called, brought me back to the users, to the Amsterdam residents. That's our job. And in practice, by working with the startup, I had to add it to my agenda: 'Today, I'll go outside with my team." Participant of Startup 101

"So perhaps we are working a little under the radar. Because the experimentation is part of this programme, we have more room, also to deviate from what we agreed on in the beginning. It is possible that the startup finds something entirely different in terms of a solution. And because it is in this context, we already have the approval – SIR Amsterdam has facilitated this. Moreover, and I'm only thinking of this now, this is one of the reasons that we feel the freedom to formulate these challenges."

Department of Waste & Resources

4. New 'energy'

"Really, the focus on 'getting out of

"You look for stakeholders who can

realise a solution in terms of hardware,

or software, and you continue to work

with them. Often, you look for startups,

or at least, I do, because innovation is

often found with young people. And it is

easy to work with them: they often have

and when I ask whether they can make

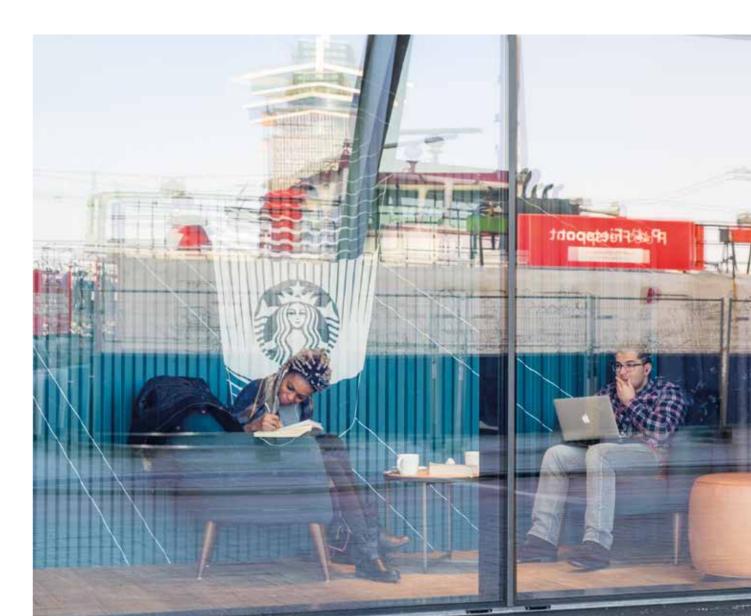
a new idea and I have my own ideas

it, they always say yes!"

Waternet

A term we hear a lot from the clients is that they get new, fresh energy from participating. For one thing, this has to do with the fact that the startups are often owned by young people who are keen to surround themselves with cutting-edge innovations and new solutions which they share enthusiastically with their client.

Besides that, there is the process of co-creation, in which policy makers or public managers became involved in the practical details of possible solutions for social challenges, whereas they usually work from a more theoretical or policy-based level. Lastly, clients greatly value the network of innovative colleagues that they came into contact with during the programme. Having access to a network of people who are also championing innovation within the same organisation was considered an important benefit.





7. Being 'in residence'

A key feature of the Startup in Residence programme is the fact that startups are awarded a 'residency' at a (local) governmental organisation. The idea behind this residency is, amongst other things, to encourage close contact between startups and civil servants and an exchange of ideas and expertise. This is guite a challenge, since the two come from extremely different worlds. The Startup in Residence approach is characterised by a back-and-forth exchange that takes place during the process of collaboration. But what does being 'in residence' mean in practice? We asked alumni of the programme - both startups and clients - to reflect on this. What did the residency mean to them?

Being a startup 'in residence'

"One of the great things about the

programme is how, intuitively, it is set

up to encourage a feeling of solidarity. We work hard and we want the

startups to perform well, but we also

make room to get to know each other

and share our hopes and worries. Every other week we have lunch with the

startups, and we have the opportunity

to just have fun and talk about life." Toon Branbergen, lead mentor

SIR Amsterdam

Chapter 5 mentioned that for startups a key motivation for applying to the programme is access - access to a network of expertise and experience, access to the right people and access to the world of government, which most startups have not engaged with before. As it turns out, this is also what they consider the great advantage of being 'in residence'. Practically, this may concern the opportunity to speak with decision-makers and to consult budget holders. From the outside, it can be challenging to know what is going on within a municipal organisation or who is working on what. As startups can take a look behind the scenes, they become familiar with the administrative structures and have a chance to speak to the people that are actually tasked with providing adequate services to the residents of Amsterdam.

For many startups, the fact that the assessment committee has approved their participation in the programme serves as a token of confidence, a quality recognition that is positively valued throughout the wider organisation. For a startup to be admitted to the programme means that they have already been awarded a tender and gone through a selection process evaluating their skills, product and value propositions. It seems that being 'on the inside' already makes it easier for startups to find the right people and arrange meetings with them. For some, this also has value in a different way: when they mention that they are official partners of the municipality, organisations interested in their product or in working together approach the startups themselves. A third way in which the residency is beneficial to the startups is that it creates a buzz it within the municipal organisation. We have seen how word of mouth advertisement between colleagues leads to new clients, jobs and partnerships.

The residency according to civil servants

Clients notice that participation in the Startup in Residence programme gives them **room to experiment**, both in terms of cooperating with an external party and in terms of a more investigative way to approach a problem and its possible solutions. Even though pilots are common within the municipality's working methods, the explorative character of experiments with the startups is generally not possible within their everyday work processes. Besides, and in line with the experience of startups, clients mention the advantage of the startups as 'approved' business partners. The fact that they are already enrolled in the incubation programme means the risks of working with them (and working without a clear end product in mind) are perceived as relatively small. We see that as the programme gains further recognition within the municipal organisation this room steadily grows.

At the same time, **not all of our colleagues are convinced** of the usefulness of the programme; some consider it extra work to guide a startup and they do not see how such young companies can be efficiently and effectively involved in ongoing policy implementation. In their view, the residency primarily favours the startups and is less beneficial for the municipal organisation itself. We see this especially amongst departmental managers: clients have to put in considerable effort to convince their supervisor that the approach can yield many valuable insights and experience.

A third, very important aspect of the residency of both startups and clients is the fact that **the co-created solution has already been tendered**. When a client proceeds to purchase the startup's solution, most of the legal and administrative matters have already been covered. For clients and their managers this presents a huge advantage when compared to other purchasing trajectories. Whether it concerns a single assignment or a long-term license agreement, once the product or service is approved we can almost instantly move to action or start scaling.

In order to make the residency as productive as possible, the Startup in Residence team has a full-time job in making sure everyone stays together and on track. During the incubation period, the team is in touch with the startups each week to keep track of progress, to see where possible obstacles are and to solve them if necessary. In addition to the training programme, we organise regular meet-ups, bik-weekly lunches, informal gatherings and peer-to-peer sessions. We keep close contact with the mentors, speaking to them once every two weeks and seeing them every month.

Towards the end of the six-month residency a demonstration day (Pitch Forward) is organised where startups and their client and/or mentor present what they have achieved. This includes a moment of reflection on their experience as well as an opportunity for questions from the public. This, importantly, is not the end of our collaboration with the startups. As a matter of fact, this often marks the moment when durable public-private partnerships start to take form.

A case study: Transformcity

Transformcity offers an online platform for cooperation in urban area development, with the purpose of facilitating a sustainable and inclusive local community of co-owners. The platform emerged from ZO!City, on which founder Saskia Beer had been working for years. As an offline initiative, ZO!City had attempted to reinvigorate the Amsterdam area of Amstel3 in the aftermath of the financial crisis: as funds from the city had dried up, the area's large-scale development projects were stalled. Beer 'adopted' the area and tried to breathe new life into it by organising events, connecting stakeholders and attracting new actors to the area who were willing to invest and engage in durable initiatives. Along the way, she noted she became a crucial node in the web of actors, creating another form of dependency for the area. She then decided to digitalise the role she had been performing in person, in order for the area's development to truly become participative and co-owned by various actors. In 2016, Transformcity was born.

For the development of ZO!City, Beer had already been in touch with the city for permits and coordination on various occasions. But for Transformcity she desired a more communal undertaking based on internal support and collaboration. In practice, this proved difficult to establish. For any tech startup, the development of a digital environment or even a 'clickable prototype' comes with high costs attached. Often capital investment is needed to make this possible. As the city of Amsterdam would be the primary stakeholder in Transformcity, it seemed feasible that they could take up the role of investor. However, without a programma like Startup in Residence, it is difficult to come to a cooperation agreement with small parties. Moreover, the city is cautious when it comes to financing development costs where it is not yet entirely clear what the end product is. For Transformcity, this implied high risks, as only a very compromised version of the platform would be feasible. When the call for the third edition of Startup in Residence was made in 2017, Beer decided to apply. And with success: Transformcity was awarded participation on the wildcard as a highly promising startup.

During the programme, a license agreement was concluded and the platform is currently being developed and implemented in two pilot areas. Besides the training programme and mentoring, how has the residency supported Transformcity? Beer describes it as having a mediating function: "As a startup, even when experienced in your own field of business, you are very small when compared to a large organisation like the city of Amsterdam. It helps to be supported by a programme like this, giving you a 'stamp of approval.' This offers some nuance in the great inequality when it comes to negotiation." For the client, the trajectory with Transformcity has demonstrated how fragile startups are and how the city's way of working can hamper ideas with a high potential. Annoesjka Nienhuis, senior process manager at the department of Planning & Sustainability, puts it as follows: "It was not until the contract with Transformcity was finalised that civil servants truly started thinking about what exactly they wanted to achieve with it and what would be their input." She notes how through the governmental way of working, the city hinders startups, loses momentum and potentially damages businesses financially. "If you want to go into business with someone, you have to be able to pay them accordingly and as you go. Luckily, with the smart way the residency is set up at SIR Amsterdam, this is now possible."

What the case of Transformcity shows us is how the residency works for both sides: both startup and client reap the benefits. At the same time, as the programme is still quite new, they are confronted with obstacles along the way, which they deal with together. The great advantage, of course, is that the startup had already been invited inside the municipality's walls, so to speak, which makes this exploration less risky and all the more promising.

Follow Transformcity on www.transformcity.com





8. A culture of collaboration: the key values

Throughout the past years, we've learned that the process of cocreation benefits from good facilitation and mediation. This is not, however, a straightforward job. It is a matter of balancing structure with flexibility and creativity with leadership. All parties involved - startup, client, mentor, and programme team - come with their own expectations, approach and work ethic. The presence of such differences means that friction will naturally occur, and that expectation management and strategic guidance are required. To ensure the programme is a truly collaborative process, each must play their part and for this we believe a certain culture must be in place.

By culture, we mean a way of relating to one another, based on a set of shared values. These values can be (roughly) divided into four categories: match, transparency, commitment and ownership (figure 8.1 on the next page). While it is possible that these are already shared among all the challenge 'owners' (startup, client and mentor) from the start, this is not always the case. In that situation, it is our job as a team to encourage these values to emerge from the exchange of knowledge, desires and expectations between them along the way.

Organisational values

The top two categories – **match** and **transparency** – comprise organisational values. Put differently, these are principles that give a degree of uniformity to the programme. With a sound challenge definition and programme structure (tendering procedure, application process and assessment format) in place, we aim to secure a favourable match between startup and client. Once this match is made, we encourage transparency from all parties in terms of expectations, working arrangements, deliverables and the feasibility of propositions. For this, we provide templates, tools and regular exchange, and make sure it is all documented properly. Of course, this does not mean that from there everything will go according to plan, or that we can foresee every obstacle that will be encountered. Contingencies inevitably will come our way. But we have learned that having these basic features in place gives us room for manoeuvre if needed, so that we can operate within those contingencies and keep moving forward.

Relational values

Our experience is that collaborating in this manner requires a certain openness and capacity for imagination. Only then can prototypes and MVPs mature into durable solutions that benefit the city and it residents. For this to happen, more than just project organisation is required. The bottom two categories – **commitment** and **ownership** – entail relational values, which are crucial in securing a shared sense of responsibility. By ownership, we mean a sense of custody over the problem, process and outcome, combined with a personal investment towards finding a worthwhile solution to the challenge. By commitment, we mean a dedication to get stuff done together, which translates into a flexible mindset, availability and, perhaps most importantly: a trusting relationship. We facilitate this as best we can, but for these relational values to take hold we are also dependent on what each party brings to the table. What makes this both exciting and challenging is that each challenge is a new experiment through which we enrich our collaborative culture (see box 7.1 and 7.2 for some examples).

'I think it's very important to make the (long-term) expectations, desires and potential barriers of both parties clear at forehand. Building an honest relationship is also crucial to prevent any unexpected detrimental consequences." Sietse Gronheid, project manager WASTED (SIR Amsterdam 3.0)

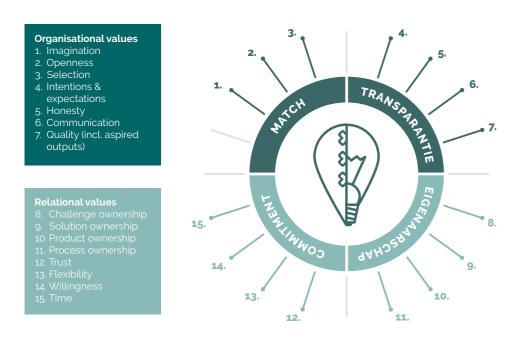


Figure 8.1 Key values for a culture of collaboration

The wildcard

That commitment and ownership are key values is even more visible in the case of the wildcard. Each year, in addition to the social challenges we list on our website, we give startups the opportunity to independently propose a solution for a societal challenge that the city has not defined in advance. In their bid, startups must define both the challenge and the solution that they have in mind. The solution must fit the city 's policy objectives as described in the city's Coalition Agreement and the municipal tasks, and it must comply with relevant laws and regulations. Experience shows that this option is highly popular among the startups (in edition 3.0, the wildcard accounted for around 40% of all applications).

While the wildcard offers great opportunities for creative and engaged startups, we have learned that it also comes with a number of risks. First of all, at the start of the incubation period the programme team still has to find the right civil servant that can act as the client and challenge owner for the startup. This can slow down the process in the first few weeks. Secondly, without the right expert in the selection committee, startup selection is difficult. Even though the selection committee may be convinced about the prospects of a specific startup, it can still be challenging to find substantial common ground between startup and proposed client. Thirdly, if no customer is found, this is likely to be a great disadvantage for the startup. Of course, the startup can still follow all trainings and workshops and the SIR Amsterdam team will do its best to connect the startup with other partners, but implementing a pilot is very difficult without a customer and can be frustrating. If a client is (eventually) found, he or she might be less involved and less committed to the programme, since the client has not followed the preparation trainings and meetings in the prior months.

Even though the risks are high, we have seen some great public-private partnerships materialise from wildcard applications. From the last SIR Amsterdam edition, KOPPL (see page 64) and Transformcity (see page 62) are good examples of successful cocreation from which we have learned a lot. In these cases, the willingness, flexibility and perseverance shown by both the startup and their client have led to focus in terms of the solution. By taking up the role of ambassador within the wider organisation, the clients support the startups to become known and expand their services. This not only offers a larger potential market, it also implies a wider validation of a startup's solution: does the idea work for other city districts? Is the startup capable of scaling up? What input is required from other civil servants in order to implement the product or service successfully?

Some 'notes to self'

In terms of the key values for collaboration, we keep on discovering what works and what does not and how we can improve this. Along the way, we have made some notes to keep in mind for the upcoming programmes. In future, we should:

- take more time for matchmaking (especially with wildcard proposals) manage expectations even better
- develop a good exit strategy for when collaboration proves infeasible
- make clear agreements on deliverables and continuation

The Great Bubble Barrier & the search for a problem owner

From the first pitch at the selection rounds, it was clear that The Great Bubble Barrier (TGBB) offered a clear-cut solution to a visible and pressing issue we face in Amsterdam: plastic waste in canals and rivers that pollutes the city and floats into the world's oceans, adding to the already enormous plastic soup there. By using a bubble screen to direct waste to the side of the waterway and making it easy to collect, TGBB stops plastic waste from further polluting our water.

TGBB entered the third edition of the programme on a wildcard and was excited to get started. But what seemed to be a straightforward problem did not have a straightforward problem owner. Plastic waste, especially once it floats in the city's canals, concerns a broad group of stakeholders:

- Waternet (responsible for safe and clean canals)
- Rijkswaterstaat (responsible for national waterways)
- Port of Amsterdam (responsible for the port region),
- City of Amsterdam (responsible for quay walls).
- City districts (responsible for and owner of waste)
- Amsterdam Clean Waters (cooperation agreement between seven parties,
- including most of the above, dedicated to reducing waste in the city's waters)

From the onset, it was difficult for TGBB to establish which actor or combination of actors is ultimately responsible for solving the issue of plastic waste in the canals. While each party agrees to the necessity of solving the issue, so far no agreement has been reached on implementing a first pilot barrier. In addition to the fragmented playing field and the politicisation of the issue, TGBB's proposal significantly exceeded the budget that is commonly allocated to pilots.

For both the startup and the programme team it is frustrating that the collaboration did not get off the ground in the way we hoped. At the same time, we all learned a lot. First of all, the efforts of TGBB have generated insight into the complex workings of the problem of plastic waste in the city.

Secondly, this case reaffirms that in case of an urban challenge that concerns more than one organisation/department, the mandate, budget and accountability for solution architecture must be established prior to the collaboration. A third lesson is that startups that propose hardware solutions, especially when highly technical and expensive to develop and implement, must be supported in breaking down their business case into sizeable chunks. While the total expenditure may very well be higher in case of hardware, we still have to make it manageable for clients to work with until the solution has proven useful, feasible and scalable.

Paradoxically, what we take away from the case of TGBB is that ownership must exist on all fronts - the problem, the budget, the solution - and that in order to move forward, true ownership requires a little bit of letting go. We are happy to announce that TGBB and Waternet are currently exploring the possibilities for a pilot. Even though it was a rough start, the great potential of TGBB's solution has been recognised and the future is full of possibilities.

For more info on what TGBB is working on now, see www.thegreatbubblebarrier.com.

Platform Eerlijk Wonen & the search for commitment

Platform Eerlijk Wonen (PEW) applied for the third edition with a proposition to address housing fraud. By developing a portal that enables strategic data access and targeted enforcement, PEW wants to enable the city and its partners to effectively attend to this issue. For a long time, housing fraud has been a major challenge for the city of Amsterdam. The scale of the problem is widely recognised and its urgency was endorsed politically when the new City Council took office this year.

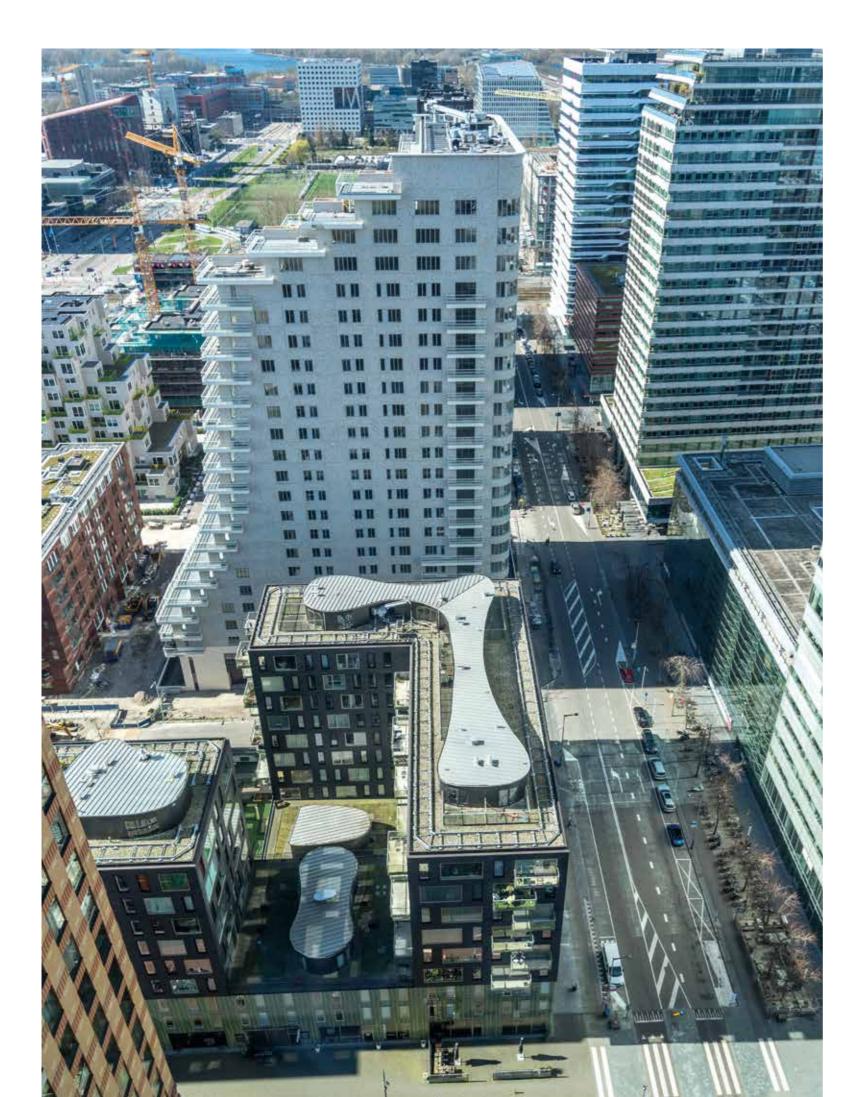
Throughout the incubation period, PEW developed its product and business case alongside their mentor and client. The startup's innovative approach, however, raised some sensitive issues that could not be easily solved. As PEW's approach implies tapping into existing data streams of the city's residents in order to track illegal subletting, questions about privacy, juridical restrictions and the ownership of data quickly surfaced. Data scientists and legal advisors were gathered to consider these questions. After this, PEW was sent in various directions and received a variety of advice from different people. Unfortunately, towards the end of the programme PEW's proposal was rejected on the highest level. The proposal in its current form, where data is stored with an external party, is considered unfeasible. However, the city is still interested in the idea and there are some other forms of collaboration that can still be explored.

What we all learned here is that the commitment to participate in the programme does not necessarily mean the client can commit to implementing the solution. Especially when civil servants deal with (politically) sensitive issues in uncharted territory, collaboration with external parties may prove too challenging.

When we asked Pieter Verstijnen, co-founder of PEW, what he would do differently if he could start over, he answered: "I would set up smaller experiments, using a closed-off 'data room'. By limiting exposure in that way, it is possible to test the working of the software without having to deal with issues of privacy and the like. This is also a way of containing the project and limiting the input from experts to relevant moments only. From my experiences during the programme, I learned that such a sensitive issue requires a controlled approach."

Please visit www.platformeerlijkwonen.nl to find out more!





9. The SIR family

sidence.com.

It's important to note that not every SIR programme is organised in the same way. On the next two pages, we provide an overview of the key characteristics of the 12 programmes.

What this growing family shows is that enthusiasm about the collaboration between startups and government is widespread. It also shows that civil servants are looking for ways to do things differently and are willing to take a bit of a risk. Each of the 12 programmes has a local programme manager who is responsible for setting up the programme and getting all the required parties on board. As we know from experience, this requires dedication and perseverance. It is not easy to get people, even our colleagues, out of their comfort zones and 'business-as-usual' state of mind. Using our experiences from the Amsterdam programme, we help other organisations to set up programmes. We share our knowledge and experience and advise the programme managers on how to organise procurement procedures, recruit startups and facilitate the training programme. On their turn, SIR family members advice us with the lessons they learn.

As things are slowly shifting towards a 'new' and innovative economy, we are happy to see so many like-minded people invest in the exciting chances and opportunities this offers. The job for this family is to help each other out and share lessons learned. To facilitate this, we organise SIR Family meetups. We keep each other up-to-date, visit events (kick-offs, demo days), make sure overall quality remains high and work towards an integrated platform in the near future (see also chapter 13: What's next).

For any municipality, province or ministry that is interested in setting up a Startup in Residence programme, we are happy to welcome you to our family! We will gladly share our experiences, documentation and resources in order for you to get going. Please contact us at startupinresidence@amsterdam.nl.

As word got out about the innovative Startup in Residence approach towards procurement and public-private co-creation, our SIR 'family' quickly started to grow. After the city of The Hague, the Province of Utrecht and the Ministry of Defence had set up a SIR programme, many others followed suit.

Currently, a total of 20 Dutch governmental organisations are involved in 12 programmes: 12 municipalities, five provinces and three ministries (the fourth is coming soon). This includes the nine municipalities that have recently joined hands in the SIR Amsterdam Metropolitan Area (SIR AMA) programme. In this programme, each of the seven challenges is represented by clients from two or more municipalities in the region, thus encouraging cooperation and goal alignment with startups on a whole new level. Information on each programme can be found on our website: www.startupinre-



Utrecht

Amsterdam

Amsterdam Groningen Metropolitan Area

Den Haag

Zuid-Holland

Noord-Holland

Ministry of Justice

Ministry of Defence

The 12 Startup in Residence programmes until 2019

	Start first programme	Current edition	Duration training & pilot programme	Training Programme Organised by (Organisation partner)	Procurement procedure	Business phase start- up (level startups)
SIR Amsterdam	2015	5	6 months	SIR team (in-house)	European Tender (ESPD)	From prototype to scale-
SIR Amsterdam Metropolitan Area	2018	1	6 months	SIR team (in-house)	European Tender (ESPD)	From prototype to scale-
SIR Groningen	2018	1	6 months	Founded in Groningen	European Tender (ESPD)	From idea to scale-up (m
SIR Den Haag	2016	3	6 months	World Startup Factory	Contest	From idea to business
SIR Utrecht	2017	1	6 months	Graduate Space/ Students Inc	European Tender (ESPD)	Variable
SIR Zuid-Holland	2018	2	6 months	World Startup Factory	None	Variable
SIR Noord-Holland	2018	2	6 months	FirmHouse	None	From prototype to scale-
SIR Ministry of Justice	2017	1	6 months	World Startup Factory	Single private contracting	Idea (not a Minimum Viab Product) (bring to prototy
SIR Ministry of Defence	2018	1	6 months	World Startup Factory	European Tender (ESPD)	Scale ups
SIR Overijssel	2018	1	8 weeks training (then pilots)	SIR team (in house)	EU Innovation Part- nership	Students, startups, SMEs, companies & consortia
SIR Ministry of Interior and Kingdom Relations	2019	1	6 months	(in progress)	European Tender (ESPD)	Startups (max 5 years and people)
SIR Gelderland	2018	1	None	None	Based on challenges - contest	Students and startups



Overijssel



Ministry of Interior and Kingdom Relations



Gelderland

	Results (long-term partnership >€10.000)	Start next programme
le-up	Contracts: 16 of the 27	2nd half '20 (Mobility)
le-up	-	-
(max 5yr)	-	2019
	Unknown	2018
	7 purchases	2018
	6 (pilot) purchases	-
le-up	1 contract	-
'iable otype)	Unknown	2018
	(in progress)	2019
IEs, large a	-	-
and 20	-	-
	The current programme has been cancelled.	

10. Three years of SIR Amsterdam



220+ civil servants trained "Startup 101: How to work as a startup?" 60+ entrepreneurs trained "Gemeente 101: How does the city work?"

Training programmes

- Top 5 most valuable trainings according
- to the startups (rating 1-10):
- 1. Pitch training = 9
- 2. Sales training = 8,6
- 3. Growth Hacking = 8,5
- 4. Governance Structures = 8,2
- 5. Business Model Canvas = 8

The training "Startup 101: How to work as a startup?" is rated at

Public/Private Partnerships

We have established partnerships with 23 out of the 27 alumni startups that have participated in the programme over the years. We look forward to add more to this soon.

Type of follow-up contracts until now:

Cooperation agreement
License agreement (Software as a Service/ SaaS)
Framework agreement (or outline agreement)
Purchase agreement

Other forms of collaboration and partnership after the programme:

- Pilot continuation
- Exploring possibilities for contracts;
- Participation in procurement procedure (tender)
- Strategic advice / consult
- $\boldsymbol{\cdot}$ Knowledge and data sharing
- Access to partners
- Access to startup events
- Access to (public) network
- Online exposure and promotion (twitter)
- Alumni network

Departments involved:

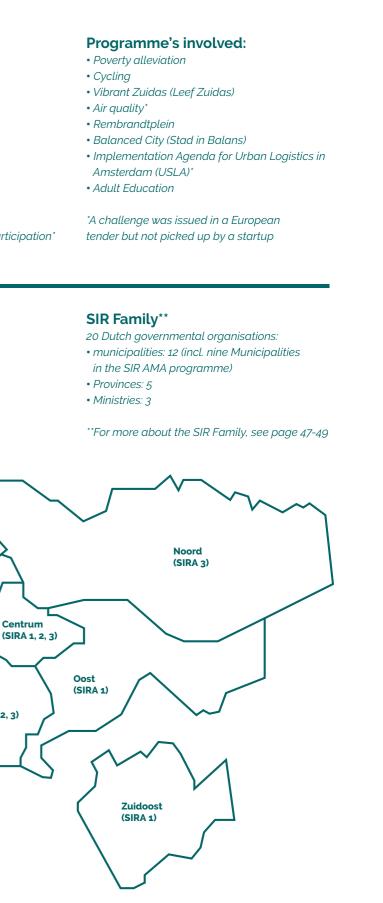
- Waste & Resources
- Amsterdam in Business
- Assets^{*} (verhardingen)
- CTO Innovation team
- Economic Affairs*
- Facilities
- City Development
- Materials & Equipment
- Education, Youth & Welfare Services
- Planning & Sustainability
- Mobility & Public Space
- Employment, Income & Community Participation*
- Housing

Other partners:

- Amsterdam Economic Board
- GGD Amsterdam
- Amsterdam Smart City
 Waternet
- West (SIRA 1) (SIRA 1) (SIRA 2, 3)

City districts involved:

Centrum Nieuw-West Noord Oost West Zuid Zuidoost



53



11. Six SIR impact roadmaps

One of the key questions this impact report addresses concerns the smart solutions that startups develop for the challenges, benefitting both the city and its residents (see also page 14). In order to illustrate the results of the startups' solutions, we have chosen to capture the co-creation process of six challenges in an 'impact roadmap'. The roadmaps offer a short description of the challenge, the match, the pilot phase and the (aspired) impact. This is not a final evaluation of what is achieved; rather, it serves as a sketch of what has happened so far, and what both startup and client foresee for the future. In the pilot phase, ideas and prototypes are tested, and it is from there that decisions are made about which elements to continue with, which ones to let go and which need more work.



SIR Impact Roadmap #1 Traffic flows

The Challenge

How do we ensure that Dutch visitors and Amsterdam residents make greater use of the whole city and region, disperse more and thus stimulate other routes and neighbourhoods?

The Stad in Balans ('Balanced City') programme seeks to achieve a (new) balance between growth and quality of life. The key objective is to ensure Amsterdam remains attractive to all, and in particular to its residents. The city can grow and developthrough dispersal of visitors, the promotion of neighbourhoods outside the centre and the creation of new urban environments throughout the entire region.

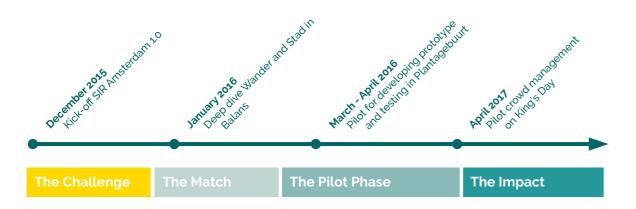


"Wander puts urban adventure back on your radar" Kim van der Leeuw, co-founder Wander

The Match

Wander provides a 'fuzzy navigation compass': a mobile app that entices visitors to Amsterdam to leave the beaten track while they are moving from one location to the next.

The curated content of the Wander app suggests alternative routes and 'hidden gems' based on the user's GPS location. In this way, visitors are encouraged to choose alternative routes on their way to the most popular destinations in the city. By guiding people away from the most crowded axis between Amsterdam Central Station and Museumplein to neighbourhoods outside of the city centre, crowds become dispersed and urban tourism can become more diverse.



WANDER

The Pilot Phase

The pilot phase was used to develop a prototype of the Wander app and to test it on tourists as well as students. The goal was to investigate whether fuzzy navigation is capable to spread visitors throughout the city.

In the first pilot, tests were carried out based on which Wander decided to develop software instead of a hardware product. The second pilot (on Kingsday) served to test the software among a close user group. This showed some promising results, see figure 1 and 2 below.



Figure 1: the beaten track in Amsterdam

The Impact

Now

A well-working app that stimulates fuzzy navigation contributes to the usage of less obvious routes to some of Amsterdam's most popular attractions.

Next

Besides that, using Wander may lead people to find recreation in different parts of town altogether. This potentially reduces queues at museums and cultural heritage attractions and unlocks the potential of other urban districts as tourist destinations.

Future

Sustainable tourism is high on the agenda for Amsterdam. Here Wander can contribute by guiding visitors to places with green and circular business models.



🗙 Stad in Balans

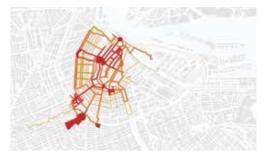


Figure 2: Tracks of "wandering" test panel



"An American couple that used the Wander app started off their day at the Volkshotel. While their initial plan was to visit the Anne Frank House, they ended up tasting beers at the Oedipus brewery in Amsterdam Noord" **Peter van Meir,** co-founder Wander

SIR Impact Roadmap #2 Traffic flows on waterways

The Challenge

How to develop a tool to enable canal users to contribute to a smooth passage and safe sailing, even at peak times.

An increasing number of people use the canals to take a boat trip on a hired or their own boat, or just to watch the activity on the water from an outdoor café. The city is responsible for everyone's safe and smooth passage on the canals. With 300 kilometres of water to cover, and only two boats with a speed limit of 6 km/hour to do so, Waternet finds itself restricted in controlling the situation on the Amsterdam canals. The question is how to make services and enforcement in this field more effective and efficient.

The Match

Global Guide Systems (GGS) offers technology through which standard AIS sensors on ships can be used to gather data on the location and speed of touring boats on the Amsterdam canals.

Global Guide Systems had already developed this technology for touring companies' fleet management, but in aggregated form it can be used to supervise crowds and behaviour on Amsterdam's waterways.

By using antennas that are strategically placed throughout the city, it becomes possible for Waternet to have real-time access to information on the situation on the water and use this to support its services and enforcement without increasing the number of enforcers on the water.



Global Guide Systems

The Pilot Phase

The pilot served to validate the technical functionality and reliability of the system. In order for Global Guide Systems to know how they could best cater to Waternet's needs, they joined enforcement teams on the water to understand the real challenges of monitoring the canals.

During the pilot, the system ran on sensors built and placed by Global Guide Systems itself. After the system proved useful, it was transferred to Waternet's antennas, thereby increasing coverage throughout the city.

"I always thought that we didn't need technology to know when and where the canals are crowded. We know this from years of experience. But the data from Global Guide Systems does give us extra ears and eyes on the water, providing us with the opportunity to run analyses and support the introduction of new regulations to improve safety and fun on the water" **Bart Sprenkeling,** coordinator of supervision at Waternet

The Impact

Now

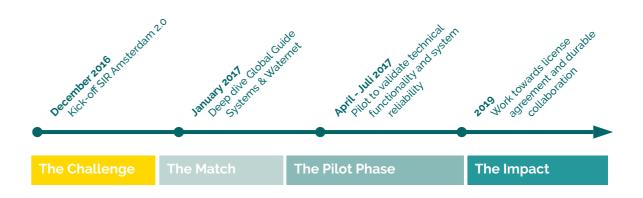
Waternet uses the data generated by Global Guide Systems to support its enforcement activities (e.g. mooring permits and speed control). A large dashboard at Waternet's floating office now allows supervisors to track fleets and individual ships from touring companies and to spot congestion easily.

Next

- Integrate alternative data streams, such as noise pollution.
- Seek ways to include recreational boating into the system.
- Improve efficiency in Waternet's enforcement efforts.

Future

Global Guide Systems contributes to the real-time data management system Waternet is building: 'De Digitale Gracht'. Also, Waternet explores opportunities for how a data-driven management system may support digital law enforcement to increase safety and create more pleasant waterways.





pollution. e system. orts.

SIR Impact Roadmap #3 Waste Separation

The Challenge

Increase the percentage of waste separation by making it simpler and more logical for residents and businesses, so that they are more motivated to do their bit.

In 2013, Amsterdam residents produced an average of 322kg of household waste per person. Waste that is properly separated is easier to recycle. Therefore, the city would like to see an increase in the percentage of separated waste: from 26% at present to 65% in 2020. Separating waste is not always easy, especially for those without a garden or with limited space indoors, or for people who aren't fully mobile. How can we improve. this?

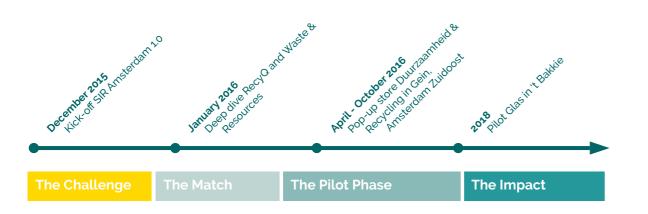
"We are making good progress, but I think we are only really successful when residents can take ownership over the activities. We still have a long way to go, but these transitions take time. This sense of ownership will develop when people experience positive examples in their daily environment." Richard Severin, co-founder RecyQ

It is RecyQ's mission to help increase the level of waste separation within Amsterdam and to contribute to decreasing CO2 emissions and the loss of valuable resources.

By creating awareness about the waste problem, making it easier for people to separate their waste and making recycling visible, RecyQ demonstrates that waste can be turned into a resource.

To create impact in Amsterdam Zuidoost, RecyQ experiments with a number of interventions:

- Information provision
- Reward with CO2 tokens (local circular economy)
- Special waste bins for residents (glass, paper, plastic)
- Worm hotel for community composting (vegetable & fruit waste)
- Extra public containers for paper, plastics, glass and textiles
- Virtual neighbourhood fund
- Glass recycling campaign "Glass in 't Bakkie"



recy C Resources

The Pilot Phase

The pilot in Amsterdam Zuidoost involved testing a set of tools and projects to stimulate waste separation and increase awareness.

A key element of the pilot is the collaboration with BuurtWerkKamers (community activation centres) in the district. These play a crucial role as waste collection points, but also as meeting points where residents can learn about waste separation.

By reaching out to residents through face-to-face contact, RecyQ has managed to build a local community of over 5000 members, supported by a group of motivated zero-waste ambassadors.

The Impact

Now

So far, the 150 users of the RecyQ app alone have separated 12,077 kg of waste, saving 17,253 kg of CO2 emissions.

Next

For the next phase, it is important to find out how RecyQ and the district of Zuidoost can continue what they have built over the past few years, while transferring the activities to the local zero-waste community and residents.

Future

Currently, RecyQ is working on white label software development, a business model challenge and impact measurement. As its community grows, so does its impact.



X Waste &

"At the BuurtWerkKamer in Venserpolder we introduce people to recycling and RecyQ. Because some people are unable to bring the bags to our weighing point themselves we go to their homes and collect it for them. This also helps raise awareness in the neighbourhood" BuurtWerkKamer Multibron

SIR Impact Roadmap #4 Waste Away!

The Challenge

Find a good solution to keep bulky waste off the street.

The city of Amsterdam collects bulky waste. In addition, the city has six waste disposal sites where residents can take their bulky waste.

However, only 25% of bulky waste is brought to these sites, which means that we collect the other 75%. Bulky waste is effectively separated at the waste disposal sites when collected by the city, but the separation rate is lower than when residents do this themselves. In addition, bulky waste and other rubbish often accumulates on the street around underground containers, causing a nuisance for many people.

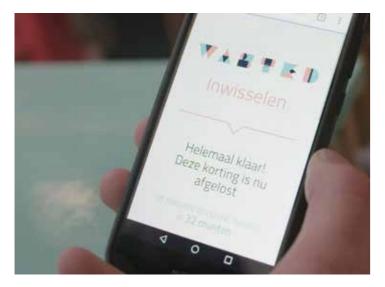
The city's ambition is to make Amsterdam cleaner and to get waste off the street. At the same time, we want to use waste as a raw material and re-use goods that still have some life in them (this happens through recycling shops and even used construction material markets). We want to be part of the circular economy.

WASTED is an initiative that works with local residents and entrepreneurs to improve neighbourhood waste separation through an innovative reward system.

For every bag of waste that is separated, WASTED members receive a digital coin which can be exchanged for discounts and benefits at local 'WASTED rewarders' throughout the city.

In 2017 WASTED, in collaboration with the city, digitalised and expanded the reward system to the entire district of Noord. With the realisation of a QR system and different activation strategies, the WASTED community grew to 1580 members – about 5% of the total number of households in Noord.

To achieve a successful continuation of this public-private partnership, WASTED and the department of Waste & Resources focus on bulky waste and a further professionalisation of the reward system.



"WASTED has developed a loyalty programme for residents from Amsterdam Noord by adding value to the separate offering of plastic, glass, textiles and paper. With this way of (net)working, they ensure that raw materials remain within the cycle for reuse and at the same time they stimulate the local economy. A valuable addition for residents, entrepreneurs and the city of Amsterdam." Floor Kuiper, policy advisor Waste & Resources

The Pilot Phase

Goal 1

Encouraging local residents to bring their bulky waste to recycling locations through the WASTED reward system (waste point, recycling shop, repair shop or community centre).

Goal 2

Professionalisation of the WASTED system so that in 2019 a scaling strategy can be formulated and the system can be transferred to the city.

The Impact

Now

The WASTED community numbers 1839 members, 52 local rewarders and 103 local discount offers. So far, the WASTED community has separated:

• 9308,2 kg of plastics • 3150 kg of textile • 7055,1 kg of paper • 12192 kg of glass

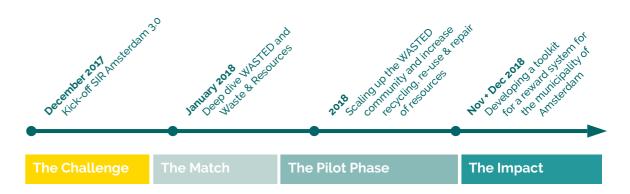
Since the kick-off in May 2018, 214 items have been dropped off at recycling sites.

Next

WASTED now offers collective rewards. Friends or neighbours can be rewarded collectively if they save up a certain amount of WASTED tokens together, for example for a worm hotel for the neighbourhood.

Future

In cooperation with PricewaterhouseCoopers (PwC), WASTED has developed a business plan to implement the system globally. Building on its experience in Amsterdam, the company will limit rewards to plastics and test a number of reward strategies. WASTED aims to trigger 9.8 million sustainable actions and 8 million bags of separated plastic in the next five years.





"The WASTED reward system is exciting but challenging: how to assign value to waste? That is not easy. The pilot in Amsterdam Noord offers the chance to experiment. The valuation of waste is an important part of the puzzle of making people aware of the economic, environmental and social value of materials. Social enterprises as well as the city play a key role in this transition" Menno Hoekstra, managing director; recycling store De Lokatie

SIR Impact Roadmap #5 Wildcard

The Challenge

How can we make urban transformation a more collaborative and participatory process?

In Amsterdam (and many other cities), we witness a shift from large top-down development of new areas towards the gradual transformation and densifying of existing areas. Rather than designing a spatial vision from scratch and implementing it in it's entirety, today urban development is a process of continuous networking and collaboration with various public, private and civic parties.

For this innovative urban development to be successful, we need innovative (infra)structures for collaboration. The city doesn't usually own the real estate in these areas and there are many different stakeholders involved that it needs to actively collaborate with in order to get results (on, for example, housing). The question is: how can we make urban transformation a more holistic and participatory process, in which the city can work towards a less centralised position and a more supportive role?

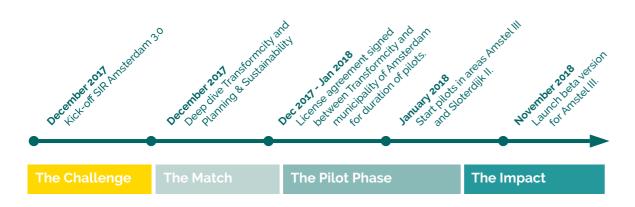
The Match

Transformcity is an online platform for cooperation in area development, aiming to facilitate a sustainable and inclusive local community of co-owners.

The platform is a 'digital swiss army knife' that integrates social networks, storytelling, interactive maps, data exchange, crowdsourcing and crowdfunding. Residents, companies, real-estate owners, corporations, organisations and the government collectively take ownership of the development of their own area.

Ultimately, the platform contributes to civil participation and resilient urban transformation.

"A city consists of many existing stakeholders and their stakes. It is crucial to build a strong community before a sense of ownership and agency can develop." Saskia Beer. founder



Transformcity

The Pilot Phase

The platform is currently being developed for transformation areas Amstel III and Sloterdijk II. The goal is to develop, test and validate the functionalities of the platform. Also, the pilot involves building and strengthening the sense of community - both on- and offline - in the two pilot areas. This means integrating open-source data made available by the city of Amsterdam and utility companies, as well as attracting other local parties like project developers, collectives, housing corporations and entrepreneurs to share their plans and projects. Interaction and collaboration between initiatives becomes possible.

"Often when private parties or residents contact us we already know what information they will need. By integrating open-source data into the platform, this process is automated. It enables us to quickly observe which initiatives are not very serious, and spot those that have large potential for an area. Transformcity can greatly increase efficiency in the work of area development teams" Annoesjka Nienhuis, senior process manager at Planning & Sustainability

The Impact

Now

- Delivering the platform for pilot areas Amstel III and Sloterdijk II.
- trust and transparency.

Next

- civil servants in area development teams.
- law') that goes into effect in 2021.

Future

Community participation and collaboration between various stakeholders (public, private and civil) will make urban areas in Amsterdam more resilient to crises and their transformation a bottom-up process.



🗙 Planning & X Sustainability

• Encouraging both public and private parties to share their plans and projects and finding a good balance of

• Transformcity invites a holistic view of urban areas and their transformation, rather than working in isolation.

• The ability to share standard procedures on an online platform improves efficiency in the daily workflow of

• Transformcity can be an instrument for the city of Amsterdam to implement the Omgevingswet ('environment

SIR Impact Roadmap #6 Wildcard

The Challenge

People in need of care or support find it challenging to find their way within the system of care - both official and informal - and support. How can we make this easier and improve people's self-reliance?

As supply of care is diverse and highly fragmented, it can be difficult for those in need and those tasked with assisting them to find the right institutions or service in an efficient and effective way. This applies especially to vulnerable groups or people who are less self-reliant for various reasons. This puts a further strain on their well-being.

"We hope to roll out to each district of the city soon. Every citizen of Amsterdam should be connected to the right care and support." Marnix Kistemaker, co-founder of KOPPL

The Match

KOPPL supports residents and professionals in Amsterdam by making it easy and accessible to find help for everyone who has to rely on (informal) care (or is experiencing loneliness or poverty). The KOPPL software has been developed to connect supply and demand in the social domain in an easy, innovative and intuitive way.

In three easy steps, the software links someone who has requested help to the right organisation. It is available on mobile devices for social or community workers, and at KOPPL Kiosks located at several public places in Amsterdam.

The goal is to encourage people to participate in society, to be self-reliant and to help each other more easily.







The Pilot Phase

The software was tested at the kiosks and through the mobile app. Three kiosks were opened in community centres in the Centre District: Claverhuis, De Witte Boei and De Boomsspijker. Volunteers, social workers and residents were consulted to validate and develop the software.

After a successful pilot in the Centre district, KOPPL is currently scaling up. In autumn 2018, KOPPL was rolling out its system across the city (to the Zuidoost, Noord and West districts). In addition to community centres, the kiosks can be found at health centres and public libraries. More public locations (such as supermarkets) will be included soon.

"The KOPPL Kiosk is a really beautiful thing. I always call him Harry! He is very accessible, discreet and easy to use. Besides that, it gives a sense of privacy to the people who use it. After all, your request for help is no one else's business. Volunteer at Claverhuis

The Impact

Now

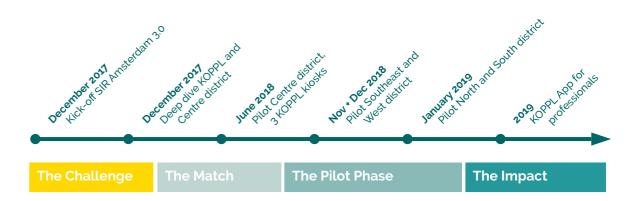
- KOPPL kiosks installed, in (semi)public spaces in 5 city districts.
- support available throughout the city.
- 50+ organisations in Amsterdam have joined KOPPL.

Next

- By introducing the mobile app to social workers and volunteers, KOPPL fosters a more efficient workflow and increases the follow-up of referrals.
- KOPPL contributes to a neighbourhood-oriented approach to accessible basic facilities. • Through software development and design, the kiosks become even more accessible and user-friendly.

Future

- KOPPL hopes to achieve full coverage of the city, so that every resident of Amsterdam is always easily connected to help and support.
- The improved accessibility of care and assistance will increase people's level of self-reliance and well-being.



🗙 Stadsdeel X Centrum

• So far 2000 residents have tested KOPPL to file a request for help or simply to explore the supply of help and



12. Failing Forward: three key learning goals

As a young and innovative programme within the municipal organisation, Startup in Residence is develops like a startup itself. We test ideas, assumptions and solutions, see what works and what doesn't, and we try to learn from this in order to scale and make an even bigger impact. Just like any other startup, we cannot and do not want to do this by ourselves. In order to grow, we collect input and feedback from the startups, civil servants, mentors, the team and other colleagues and stakeholders that are willing to share their views. In this section, we reflect – in the form of a Q&A – on three key issues that have emerged as learning goals throughout this impact research.

1. The pilot paradox

One of the most difficult parts of co-creation is creating a lasting collaboration. How do we make sure that from a pilot – an experiment by definition – it is possible to move towards a more stable collaboration? Often, the characteristics that are required for a pilot project are the very same characteristics that make it difficult to scale up and integrate into an existing system, infrastructure and organisation. This is called the 'pilot paradox.'⁹

Question 1 - How can we design pilots in such a way that future possibilities and necessities are taken into account, in order to foster a durable public-private collaboration?

"Perhaps the pilot, the experimental phase of the programme, should be approached in a looser sense. Not as a delineated project, but much more as a milestone, a step on the way to innovation. This way, it may become easier to overcome the pilot paradox that we sometimes see (where pilots are treated as small projects and experiments that do not necessarily turn in to longer-term programmes or collaborations). What this requires is a stronger relationship between the startup and the client's department. An option would be to identify a SIR representative or ambassador at every participating department who can introduce the startup (inviting them for a pitch, or to come to work onsite for one day a week), keep colleagues up to date on progress and establish a more profound connection with existing policy frameworks and everyday practices."

Tom Hallowes, mentor SIR Amsterdam 1.0, 2.0 and 3.0

"In order to minimise the pilot paradox, it is important to envision how a startup's value propositions relate to existing policy goals and integrate them explicitly from an early stage. This does not mean that a startup becomes the executor of a civil servant's tasks or KPIs, but it does mean aligning the efforts of the two strategically. Within the municipality we see that this can be challenging, especially if a project concerns more than

one department. But when startups and individuals from each department are willing to commit to shared ownership - financially, conceptually and regarding (future) execution of the solution - pilots can be the start of durable solutions."

Sanne Collette, impact researcher SIR Amsterdam

2. Different rhythms

The worlds of startups and government quite clearly move at different paces, or different rhythms even. From what we have seen, to align these two rhythms within a single collaboration is not an easy job. The municipality is used to work with (annual) budgets that are prepared well in advance, but the Startup in Residence approach does not easily fit into this. On the one hand because we often deal with projects that span across two calendar years, on the other because we do not know exactly what the solution will be at the start. It is then impossible to know what the costs will be exactly and how we have to budget for this.

We noticed our colleagues find this guite challenging: how to organise budgets more flexibly in order to answer to the needs of the quickly developing startup? While civil servants may be concerned with a timely allocation of funds for programmes in the next guarter, year or (4-year) administrative period, startups develop and expand at a swift tempo, focusing primarily on what is needed for the next two-week sprint. And while a decision about changing the course of business may take a startup just one or two "daily stand-ups" (brief team meetings), weeks may go by before the right secretary or managing director is available for an exploratory consultation on an ongoing project at the municipality. This is neither a value judgement, nor an exaggeration; this is just how it is.

But the difference in rhythms concerns more than just cash flows - it concerns a different perception on the reality of acting. It's about what startups and civil servants consider to be possible, necessary, required and feasible.

Question 2 - How should we deal with the different rhythms of startups and government, as these sometimes seem to mutually exclude one another?

'The first step in uniting these two worlds, is for both of them to realize how different they are and encourage a mutual understanding. The startups, for instance, may not realize that their clients often have a reason for being hesitant or slow in taking the next step. They may be dependent on other colleagues, who need to be gradually convinced to get on board, or the client may not be the (only) decision maker. To bridge this gap, we give trainings to startups about the governmental structures, administrative procedures and the annual budget streams. The civil servants, on their turn, are trained in a startup way of working. They are encouraged to grasp the short cycles and low risks of the startup way: instead of making a fully-fledged and risk averse project plan for five years, they are stimulated to think about testing assumptions, validating ideas and pivoting if necessary, together with the startup"

Laura van den Boogert, Project Lead SIR Amsterdam 3.0 & SIR Amsterdam Sustainability

3. Productive friction

Given the various sources of difference between startups and civil servants, conflict - or friction - seems to be inevitable. But it would be a shame to consider friction a negative side effect or something to be overcome. If anything, friction moves us. It makes us aware of our position regarding one another and shows how we are related. In terms of a public-private partnership like Startup in Residence, for the programme team the question is how best to regulate such friction.

We have noticed how it can both hamper communication efforts and encourage resourcefulness. For entrepreneurs that are relatively new to the game, friction could feel threatening, as if there is no room for them in the world of government. On the other hand, for more mature startups friction with a client may motivate them to sharpen their business propositions and show that they are invaluable in solving a challenge. On the client's side, friction in the process of working with a small party could make them aware of the assumptions underlying their challenge definition. For instance, when civil servants are enthusiastic but unable to translate the startup's concept to their manager, it becomes difficult to secure implementation.

Question 3 - What role should 'friction' - the incongruity between colliding forces play in collaboration between public and private partners?

'Of course private and public parties are very different in the way they work. But even though they have different views on how to accomplish things, we see that many people share the same goals: a healthy, sustainable, vibrant city for people to live, work and recreate. When we look at it this way, we see how the two can inspire each other. For this to happen, startups and civil servants must be encouraged to talk, reflect and test their ideas together. A good sense of imagination is important here: when both parties are able to envision the world they desire and explain this to each other, their collaboration can accelerate and become a sustainable partnership. And if this turns out to be unsatisfactory, it is important we have a good exit strateav in place to make sure both can "opt out" in the best way possible and take the lessons learned with them in future activities'.

Pim Stevens, mentor SIR Amsterdam 3.0

"Success comes in many shapes, forms and sizes, but we always need friction in order to change. This way of working together requires a different approach from the civil-servantas-a-client. To work in co-creation is very different from traditional 'clientship' and requires a more open and accessible attitude from the municipality. We need to learn how to design and execute good experiments and how we can best use the results for the future. Many startup founders feel it is key to retain their individuality and autonomy and to not lose their business throughout the scaling process. For the city of Amsterdam, this is clear as well: it is the city's intention to act as the startups' launching customer toward the end of the programme. Startups keep 100% ownership of their company (we take no equity)."



Minouche Cramer, Minouche Cramer, SIR founder and Startup Officer Amsterdam

13. What's next?

To increase our impact and take innovative procurement to a higher level, we will be



"There is no format to success. Every day and every year we improve the programme. You can compare the programme with a form of craftsmanship: it is the will and drive to learn continuously and collaboratively. In the end, the programme is successful if it becomes part of daily routines and those routines have made the programme itself obsolete. For us, it is a journey with the ambition to make a difference, to change, to have impact and be responsible for the greater benefit." **Toon Branbergen**, lead mentor SIR Amsterdam After looking back on what Startup in Residence accomplished so far and the lessons we have learned, it is now time to look forward and see what's next. In the past years, the goal has been to find a way to use smart, applicable solutions for government issues through the use of new technologies and to stimulate co-creation between civil servants and the (Dutch) innovation ecosystem. In the years to come we will continue this journey. To increase our impact and take innovative procurement to a higher level, we will be scaling up our approach. In this chapter, we explain how.

Towards a "new normal"

First of all, we do this by organising a number of SIR programmes that are **bigger** and **thematically focused**. By bigger, we mean with more and diverse partners. In the upcoming programme's, we put even more emphasis on achieving a collaborative government. For the current Amsterdam Metropolitan Area programme (SIR AMA), we are testing whether we can jointly issue challenges with 9 municipalities. After all, challenges such as smart mobility do not end at the A10 (Amsterdam's ring road), and problems such as loneliness and a lack of vibrancy in city centres are not limited to a single municipality. In the AMA programme, each challenge is "owned" by at least 2 municipalities, which means startups work together with multiple clients at once. For us, this programme is a first test in which we explore what "collective clientship" entails and what productive co-creation requires on this level. If successful, the aim is to increase all of our programmes beyond just the city of Amsterdam. In addition to stimulating collaboration between governmental organisations, we also look for ways to include semi-public and private organisations in the process.

Moreover, we will organise the upcoming programmes around one theme at a time. This way, we make an optimal combination between content and process and we use existing networks. By working together with a number of startups and clients around a single theme, we can increase our impact. Knowledge sharing and cooperation will increase: startups can collaborate, but also municipal departments can work together to experiment with less traditional market parties to come to smart and effective solutions. With likeminded individuals and a training programme tailored to the specific theme, we can learn even more about what works. The themes we will address in the coming years are: Sustainability, Mobility, Digital City, Energy, Circular Economy and Urban Development.

Secondly, we will explore how we can **facilitate an infrastructure for co-creation**. In order to arrive at a new normal, we need more than just more and bigger programmes. If we truly want to stimulate co-creation between partners in the city on all major social challenges, we must facilitate a way to match the supply and demand of innovation. For this, we could develop a purchasing platform where government and businesses can find each other. This platform is connected to TenderNed and compliant to all legal requirements. The objective of the platform is threefold: 1) to improve the accessibility of procurement for small innovative parties, 2) to increase the visibility of businesses and their solutions for governmental organisations and 3) to make it easier to share smart solutions between (semi)public and private parties. A precondition for this platform to work is that (legal) information is organized and clear for a diverse audience and interaction is supported by sound user centred (UX/UI) design.

Both the updates to the SIR programme and the purchasing platform are concrete steps toward a standard of co-creation and innovative procurement. They will help us build a strong and connected community of entrepreneurs and civil servants that is familiar with innovative approaches and motivated to develop smart and durable solutions.

Scaling up

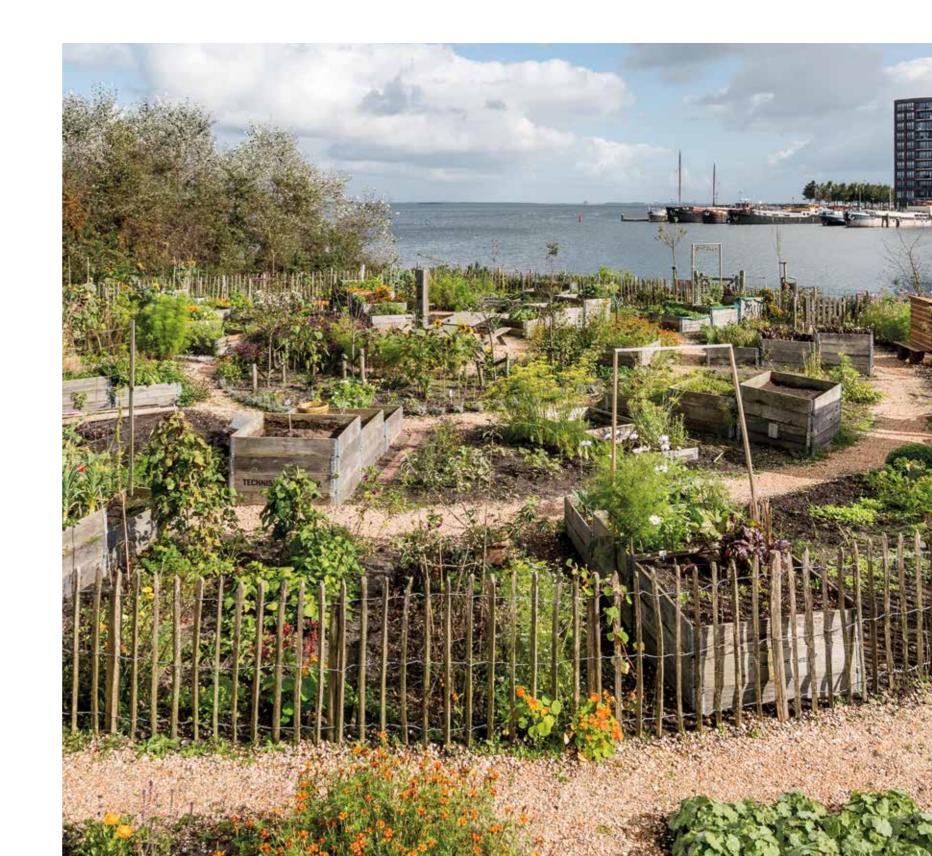
As an incubation programme, we are well aware of the challenges and pitfalls of scaling up. So how do we gear up for this at? In the past three years we experimented with the preconditions for a programme like Startup in Residence to succeed. First of all, procurement procedures must be accessible for innovative parties (chapter 3). Secondly, a number of values should be shared among participating individuals, a culture if you will, that enables and encourages collaboration: match, transparency, commitment and ownership (chapter 8). A third important element is the organisational process. We know that co-creation is best achieved and most effective when achieved step by step. This way, a good "fit" between challenge and solution can be established, the risks of purchasing are kept at a minimum and benefits for the city can be maximized. Rather than moving ahead full steam, we must make sure we test and validate our efforts along the way: how does it work out in practice and are we still doing the right things?

In fact, we already have some new questions that we will answer in the months to come. The new developments we have in mind for Startup in Residence concern an internal (municipality) and an external (business and partners in the city) process at once. Externally we want to explore the demand from small parties that experience they are too small for current purchasing procedures. By conducting market research over the next few months we will assess their needs (as far as we do not know them yet). For example: do parties know what they are talking about regarding procurement, do they know what is expected, in terms of rights and obligations? So far we know that this is usually not the case, but we want to investigate what their question really is and how they would like to be facilitated by the government. Internally, the municipality itself also has a task to see where improvements can be made. An important step is to broaden the simplified tendering process, without losing sight of the legal frameworks. Of course, we already know guite a lot about this and we know a lot about the questions and critiques regarding standard procedures. Some further questions we want to answer are: which type of tenders entail (many) opportunities for innovation? What are obstacles for procurement officers? And which difficulties do departments run into when they provide content for a tender? Based on these insights we could develop formats and (new) standards for various forms of tendering that put innovation first. The question is how we can encourage and support our colleagues to choose the right procurement process to match their challenge.

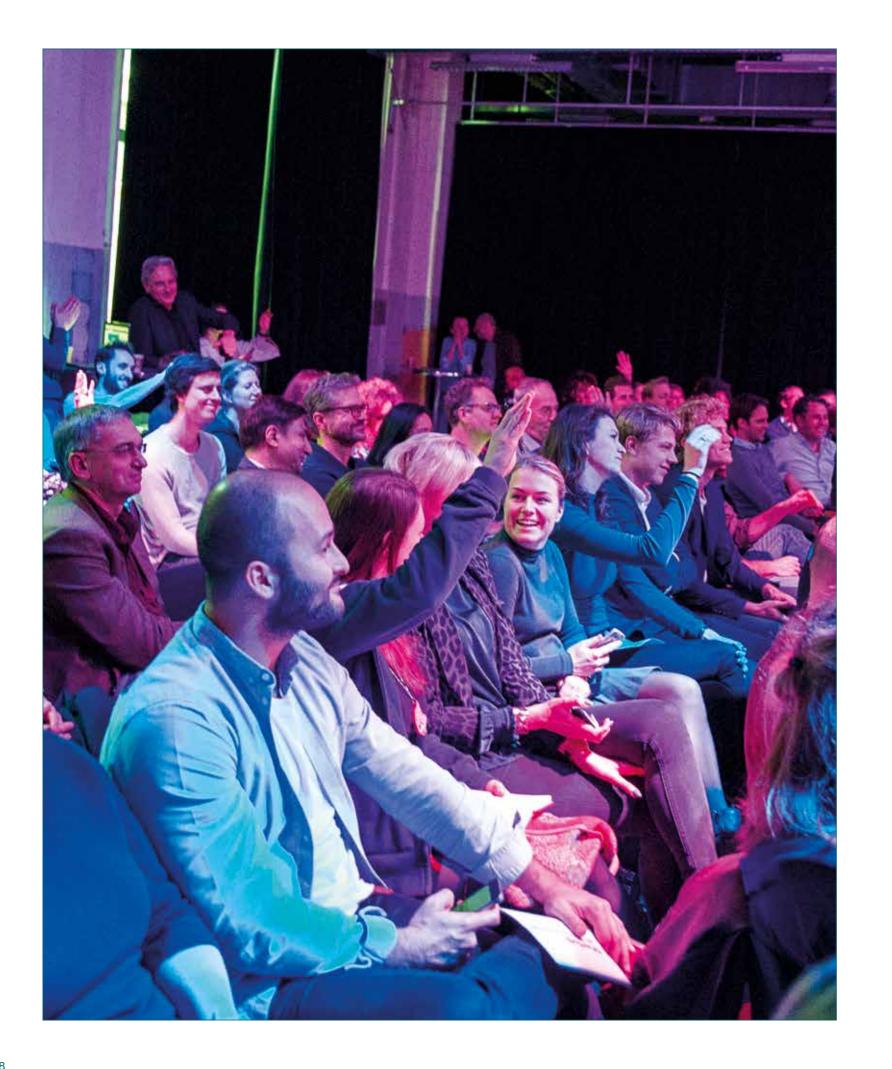
If we can realize these matters on a larger scale, larger social urban challenges of the municipality and the city can be made accessible to innovative parties. In time, this allows the (local) government to develop a dynamic relationship with the market, aimed at building solution with (local) businesses, rather than solely taking up the role of client or lead buyer. Creativity and entrepreneurship will become part of our business-as-usual.

Accelerating transitions

In order to arrive at co-creation as a new normal, first of all in Amsterdam, we have our work cut out for us. By the end of next year, a first part of municipal tenders should be posted on the purchasing platform, accessible to the innovative ecosystem in Amsterdam. The current coalition agreement explicitly mentions the municipality's ambition to strengthen the development climate for startups and scale-ups: 'we examine how we can stimulate their growth, make procurement criteria more favourable and encourage the establishment of a platform for companies'. By doing what we do at Startup in Residence, we believe we increase the scope of action for residents, businesses and visitors. In this way, the transitions our city needs can be accelerated.







14. Concluding remarks

We have said it before and we will say it again: as a programme, we learn, reflect and adapt continuously in order to keep innovating. In this report we demonstrated that along the way we have been thoroughly challenged, as a result of which we've developed a manner of 'failing forward', alongside the stakeholders involved. Let's wrap up this first impact report by briefly reflecting on the three impact goals we defined in chapter 2 (page 14). For each goal we indicate what is already achieved (now) and what will be our next step (next).

1. Smart solutions for the city and its residents Now: The 34 (alumni) startups and their clients of SIR Amsterdam developed a large array of exciting and renewing ideas, products and services for the city. As unique innovation experiments, the solutions are all in varying stages of development and implementation: ranging from pilots, to "pivots" (new directions), to scale ups or long-term agreements that already directly benefit the people of Amsterdam.

Next: In the coming years, we will continue to work with promising young innovative companies on the city's challenges. Together with (local) governmental organisations, and structured around pressing societal themes (sustainability, mobility, etc.), we will soon be opening up new challenges for public/private co-creation. We make sure to always keep in mind the city's residents during this process, so more impact for the city is on its way!

2. Facilitating innovation in the municipality

Now: Participation in the Startup in Residence programme has encouraged civil servants to broaden their scope in solution development. It helps civil servants to sharpen their challenge definitions, to bring into view the key features the solution should include, and to experience the 'build - measure - learn' approach. As they take with them their experience after the programme, slowly but surely the municipal organisation becomes more familiar to this way of working.

Next: Building on our broad experience, we are able to support our colleagues even better in their role as clients in this co-creative process. Moreover, we continue to stimulate and facilitate (alumni) clients to share the lessons they learn with their colleagues and managers. The programme team plays an important role here: how can we make sure these new methods and the "new energy" translates into a lasting innovative mind-set throughout the entire organisation?

3. Enabling innovative procurement

Now: The Startup in Residence programme has proven successful for public/private collaboration. Within the rules that apply, we managed to make the procurement process accessible for young innovative companies. Moreover, testing and validating

ideas and prototypes from an early stage lower procurement risk. So far, nineteen other governmental organisations were inspired to do the same: the SIR Family is expanding quickly, and we hope to be adding new members soon.

Next: Now that we have elaborately validated our approach, the next step is scaling up. We believe innovative procurement should become a "new normal". We are currently exploring the possibilities to facilitate this, both inside and outside the organisation, in order to increase the amount of challenges open for public-private co-creation.

In sum, the emphasis on learning and development is the strength of our approach. Because we realise the importance of learning and validation, we are always working to ensure that the ingredients are there to further develop the programme. Every year, we work at getting better and we try to turn the feedback and lessons learned into new actions. This keeps us from working on autopilot and prevents stakeholders and potential clients from losing interest. We want to inspire enthusiasm to participate and this requires active ownership: every year we want to feel that the programme is exciting and share this with client and startups. Only then can we keep on making impact that benefits the city.

Appendix: Startup in Residence assessment criteria

The assessment committee will arrive unanimously at one integral score based on the three criteria described below. The three aspects will be assessed conjointly, where each criterion has an equal weight. The assessment committee will give one integrated score because the integration of these criteria and the way they strengthen and positively affect another is an important part of the assessment. Based on the startup's bid, the (optional) subsequent pitch and the round of questions, the assessment committee will consider the following areas as part of the assessment:

1. Vision and innovation

The assessment committee will look at the following aspects of vision an innovation. The more persuasive the vision and innovation, the higher thebassessment:

- What is the company vision in tackling the social challenge and to what extent does it contribute to solving the social challenge?
- How unique is the design of the concept in the short and long term?
- How creative and innovative is the bid whilst not losing sight of the chosen solution method?
- To what extent does the product already exist and to what extent is the product innovative?
- Is the technology innovative and can it be used for implementation with respect to the social challenge?

2. Impact

The assessment committee looks at what the positive impact on the City and/or its inhabitants could be. The bigger the expected positive impact, the better the evaluation of the committee.

- The use of manpower, scope and task distribution across the Startup will be examined.
- What possible impacts will the product or service have in the short and long term?
- How can the currently available prototype or beta be further developed?
- To what extent does the product or service contribute to the solution of the social challenge in guestion?
- What are the impact goals en how do you intend to achieve them?
- Why is it likely that your Solution will succeed?

3. Realisation and implementation

The assessment committee will look at the following aspects of the realisation and implementation of the solution. The more specific the proposal for realisation and implementation, and the more confidence this instils, the higher the assessment. • How feasible is the solution?

- Who implements the solution? • Who maintains it?
- or external suppliers?
- the future prospects if it becomes a success?
- replicated in other cities.
- realise its solution.

The full text of the Request for Tender SIRA can be found on www.startupinesidence. com/amsterdam/apply/

• How easily will the product/service be deployed and implemented?

• Is the timeline realistic and is it financially feasible?

• What does this require in terms of cooperation with another department of the City

• What will the product or service look like in the short and long term, and what are

• Taking into account broader future implementation, the assessment committee also considers the scalability of the offered products and services and how they can be

• The Startup has a clear expectation regarding the municipality's role in order to

'In the past we only knew the concept "in residence" in combination with the term "artist". When an artist is immersed in an entirely new environment, their work is affected by that environment, and the environment is affected by the presence of that artist. This produces an inspiring exchange. Startup in Residence is a similar phenomenon. It's a programme that removes entrepreneurs from their familiar surroundings. The startups that are participating become part of an environment that is entirely unknown to them. And with Startup in Residence, it is not just the startups that are 'in residence' but also the municipality itself. This is also part of the learning process we are starting together."

Stan Kaatee, managing director of Economic Affairs, City of Amsterdam

'With the programme we plant a lot of seeds. After experiments and testing, only a few initiatives last. What makes this worthwhile is that the ones that last are of great quality."

Anita Poort, legal counsel, Directorate of Legal Affairs, City of Amsterdam

'It is not all successful, but we are learning very quickly. Those learning, testing, units in a larger whole - that is what this program stands for. And it is also a cultural thing to continuously develop oneself: we do this with the startups, but also as a team."

Toon Branbergen, lead mentor SIR Amsterdam 1.0, 2.0 & 3.0

"Of course we hope that the municipality will become the startups' first customer. But a company that is purely focused on one customer is not a company. That is why the mentors also specifically focus on scalability and the sustainability of the business model. "

Liselotte Westerveld, programme manager SIR Groningen

"Of course we hope that the municipality will become the startups' first customer. 'I have never worked for such a large organisation as the municipality of Amsterdam before, sixteen thousand people is a lot. But one of the questions that I run into, almost weekly, is: who is responsible for what? I think this programme contributes to bringing together people with a similar mind-set. It can become a kind of network within the municipality that colleagues can go to with challenges that require innovation'

Client of the department of Sports and Recreation

Colophon

March 2019

Author Sanne Collette

Design Studio 3 Hoog

Fotography

Vera Duivenvoorden JKtv Fotobank Amsterdam: Alphons Nieuwenhuis, Edwin van Eis, Dida Stolk, Marjolijn Pokorny

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Acknowledgements

We gratefully acknowledge the involvement of many people who contributed to this first impact report and the Startup in Residence programme in general. Thank you to our founding partners, CTO Innovation team (municipality of Amsterdam) and StartupAmsterdam, for making the Startup in Residence programme possible. Thank you to Minouche Cramer (SIR founder and Startup Officer Amsterdam) and the SIR Amsterdam team for your hard work. We are happy to do this together with our colleagues (including legal counsellors and purchasers), the SIR mentors and the trainers, with their expertise and enthusiasm they greatly support the programme.

We are grateful to all clients ("opdrachtgevers"), from the municipality of Amsterdam, Waternet, Amsterdam Economic Board, GGD and the MRA Bureau, for formulating their challenges and being open to innovation. This also goes for all the **startups** that have applied for and participated in the programme so far, and the smart solutions they develop for Amsterdam and the its residents. We are happy to see the SIR Family grow; we know that with likeminded individuals we can further develop Startup in Residence approach to make an even bigger impact.

This impact report was realised through participant research by our impact reporter and author, whose analysis was valuably supported by the insights of researchers Eefje Smeulders and Nick Toet.

Finally, a word of thanks is in order to all other partners, organisations and individuals who support the Startup in Residence programme and its activities. You help us make impact!

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