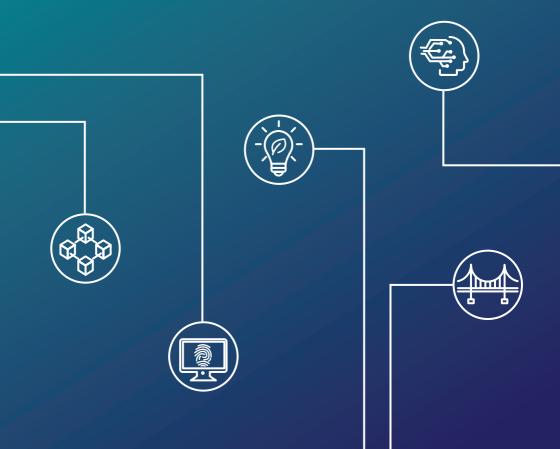


INNOVATING BEYOND BOUNDARIES



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DIGICAMPUS

COLOFON

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Foreword

It is sometimes said that, "the most beautiful flowers bloom at the edge of a ravine". This is often intended to encourage people to seize opportunities, despite the risks involved. This proverb comes to mind when I think of 'Innovating Beyond Boundaries'.

Steering innovation, including technical innovation - at the edge of a ravine - is, as far as I am concerned, a top priority for central government. Technological developments provide vital opportunities, but often also pose challenging ethical questions. If we, as a government, do not have solid answers to such questions, risks can become a reality. We must relate to technological developments in the best possible way and therefore it is important that we challenge ourselves to evolve faster and have the courage to experiment with innovation, without compromising the due care that you would, and indeed should, expect from the Government.

Sharing and collaboration are vital for true innovation. There are many areas where it's simply not possible to innovate without involving others. If I look at my own ministry for example, these areas include poverty and debt, integration and lifelong learning. It is almost impossible to think of an area that you can deal with effectively, independently as a ministry. This is why we, the Secretary Generals (SGs) of the ministries, are also investing in collaboration beyond our boundaries.

As central government, we do not always succeed in effectively exchanging (technological) developments and insights consistently and in a timely manner. All too often this leads to repeatedly learning the same lesson. We also need to consider ethical and normative issues and social consequences more quickly and at an earlier stage so that we don't subsequently discover mistakes that could have been avoided. We are now improving this between departments, with support from our administrative bodies, which is enabling ministries to learn significantly from the implementation.

An open mindset that fosters support and approachability is key. Simply connecting within the national government does not go far enough, we need to seek out our fellow government bodies, knowledge institutions, businesses and citizens. There is so much knowledge in our society that we can tap into and apply. I am convinced that innovation, together with putting the end user first, can work hand in hand with reliably carrying out our public duties.

This is the reason I'm so enthusiastic about Digicampus and 'Innovating Beyond Boundaries'. They offer a practical approach to innovation, including ethical issues. In this publication, you will learn about several initiatives and parties who are working together on innovation, beyond the boundaries of their organisations (and areas of expertise). The publication also looks at important success factors and the requirements for a solid foundation, such as trust.

Above all, I hope that this publication will inspire you to take the first step, reach out and take a firm grip of other outstretched hands (as soon as this is allowed!). If we hold on to each other firmly, reaching the flowers at the edge of the ravine will be less dramatic and less risky, but only if done correctly. Digicampus can help with this.

Loes Mulder, Secretary General, Ministry of Social Affairs and Employment

Innovating Beyond Boundaries

The world around us is constantly changing, partly due to rapid technological developments, social media and international affiliations. Tasks are increasingly becoming too large for a single party to handle. Take the climate issue and the Paris Climate Accord for example, or the growing debt problem.

It is therefore vital for the government to continue to innovate and to do so in collaboration with others. Other departments, other ministries, other layers of Government, but also knowledge institutions, civil society, companies, entrepreneurs and citizens. Cooperation between the market, Government and science (triple helix) and even with society (quadruple helix) is becoming increasingly common, in order to solve these issues and to create value together, for both social issues and technological developments.

Digicampus therefore offers a meeting place for industry, government, academia and society to innovate together beyond their boundaries. We guide 'collaborative innovation' - structural innovation or innovation that meets social needs - which cannot be achieved alone. A number of parties have had proven success with this. We visited twelve collaborative innovations for inspiration. We looked at the types of collaboration out there and what the preconditions were for success when parties embark on collaborative innovation.

Why start a collaborative innovation and how?

The reasons for organisations to start a collaborative innovation can be grouped into three broad categories:

1. Working together on social challenges due to joint responsibility Organisations work together if they are part of a social problem or affected by the solution to a problem and are dependent on each other to innovate. Often, these are organisations that are part of a chain. SchuldenlabNL (Debt Lab NL) is a good example, which works by connecting the support workers and creditors of a person in debt. This can involve various government organisations, fixed monthly outgoings such as insurance companies, utility providers and housing corporations, as well as banks and debt recovery services. There is usually no principal/contractor relationship between the

government and the private party. Often, most of the funding comes from the government. This can be in kind by facilitating people, but also in cash with programme budgets or subsidies. Companies also contribute to the financing if they benefit from it, either in cash or in kind by contributing their knowledge and network.

2. Learning together, sharing knowledge and expertise

Based on the idea that companies and governments have specific knowledge and expertise that the other does not possess, it can be beneficial to work together on technological and social innovation. A concrete end product is not necessarily always the goal but developing and acquiring knowledge about the application of a new phenomenon. The subject of Self Sovereign Identity, for example, is still very new and there's still a lot to be discovered and developed to determine what the possibilities are and how it should be used. A variety of government organisations, such as ministries, municipalities and the police, information and communications technology (ICT) suppliers and companies like KLM, are working together on a programme known as Odyssey to delve deeper into this subject. The Dutch Blockchain Coalition and the Dutch AI (Artificial Intelligence) Coalition do this for blockchain and artificial intelligence.

This kind of collaboration can be done (partly) on a contract basis, unless the other private parties also have an interest in cooperating because it allows them to expand their knowledge. In this case, they often work together with no money changing hands or they pay a membership fee to be allowed to join the collaboration.

3. Sharing risks and innovating more efficiently

The first public-private partnerships started as early as the 1980s and were driven by the idea that by working together, the government would bear less risk and the market would be able to carry out the work more efficiently. Public and private partners worked together over a long period according to an agreed risk allocation. For example, for the construction of a bridge or a new motorway. This form of collaboration is also increasingly being used in other areas, for example when specialist knowledge is needed on various topics at the same time. In this type of collaboration, the government is the client and actually buys an end product from one or more market parties. An example of this is the framework agreement concluded by De Verkeersonderneming (The Traffic Company: A cross-regional collaboration for mobility).

In a collaboration, the Government doesn't always have to take the role of client and the market as contractor. The Government can also finance certain market activities using subsidies, loans or guarantees. The Government can stimulate certain market activities by reducing taxes or making certain activities licence-free. For example, the municipality of Delft has assigned the land for The Green Village reduced-regulation status under the Crisis and Recovery Act.

What are the preconditions for success?

What we have learned is that every collaboration is unique and requires a great deal of tailoring and human input. Content drives the legal form. Nevertheless, we think there are general lessons to be learned from the twelve collaborative innovations in this publication. These lessons reflect a full range of possibilities and considerations. We have identified several preconditions for success, such as investing in common ground, formal and informal structures, solidarity and fairness and independence. We have attempted to summarise the most important lessons. Allow these twelve collaborative innovation stories to inspire you and help you take the first step! We conclude the publication with a useful summary incorporating all tips and steps.

Digicampus welcomes you with open arms to innovate together using our knowledge and innovation agenda. Digicampus can investigate which forms and methods of collaboration are most suitable for your collaborative innovations. We learn by doing and are happy to share our lessons and inspiration.

Have fun reading!

Danja von Salisch and Giulietta Marani

Building trust

Creating value by collaborating with industry, Government and academia (triple helix) and even together with society (quadruple helix) is becoming increasingly common, especially for tasks that are too large for a single party to handle. Whether it is a social issue or a technological development, Rutger Zuidam says: "We see that many parties are on a quest. How do we deal with the issues that affect us when we are not the sole owners? And where we don't necessarily have to provide the solution? It is really about issues that can't be solved by a single organisation alone or where a solution can't be purchased off the shelf and rolled out. Issues where the solution means involving as many stakeholders as possible who are relevant to the complex system surrounding the issue."

It is clear from all twelve collaborations that developing trust is the key to a good triple or quadruple helix. Trust in each other as people, organisations and trust in each other's competences. Trust that everyone will continue to stand behind the collaboration, support each other and won't walk away through good times and bad. This can only be achieved if the collective interest is truly felt and is paramount. Kees van der Klauw put it like this: "What counts for me is integrity. The moment you join the Al Coalition, you are no longer there for yourself, you are there for the collective interest. And you have to be able to balance your own self-interest against that of the collective interest." This is not to say that there is or should be no self-interest. There must be sufficient added value for everyone. To get the cooperation off to a good start everyone must allow each other their own added value. But the basis is commonality. "The basis of our collaboration is that we tackle common problems together," says Van der Klauw.

How do you prepare the foundation for trust?

- A set of basic rules of conduct
- Intrinsic motivation to solve a shared problem or task
- A shared point on the horizon for the job in hand
- A spoken understanding that you need each other to get a step closer to that point on the horizon
- Honesty about self-interest and the added value you hope to achieve by working together
- Quick to achieve common results and experience the added value

You have to build trust together. By giving and granting more than taking in the first place. By creating realistic expectations. By getting to know each other well and building a community. Informally and formally. This can be achieved through governance, for example, as was done at the Dutch Blockchain Coalition (DBC). "I believe the strength of our coalition is that in the beginning, governance was developed that looks at cohesion and community feeling. That community feeling was, and still is valued, but particularly in the beginning. It helps enormously if you manage to create a sense of 'us' in your formal governance at the beginning, by giving parties an important voice in where you are going together. It is important that you have someone who can invest in this and can steer it, and who also spends a lot of time behind the scenes to reduce friction," explains Sandra van Heukelom, from DBC.

This feeling of community, but especially equality, often requires a neutral place or an independent intermediary to encourage and monitor it. A place or person that can help them break away from their own organisations. Irene Duyn of Cumulus Park Studio recognises this: "We often see the largest party assume a dominant role, setting the agenda for the entire project from its own perspective. A key lesson is that in multi-stakeholder collaborations it is important that all participants are equal and that it helps if the location and the process management are organised by a party that has no self-interest in the project." Cumulus Park Studio's goal is to take on the role of neutral facilitator explains Duyn. "If we really want Cumulus Park to flourish and to make it inviting for everyone, initiator ING will have to 'let go'. That is why a separate entity is now being set up, a foundation that represents the interests of all the participants and not just those of ING."

Establishing a basis of trust requires investment in finding common ground; connecting the right partners with support; a process of solidarity and fairness; a structure for informal and formal rules of collaboration; and in independence from one's own organisation.

Investing in common ground

Focus on the common task and *common ground*, and work together from there. "Of course, collaborating parties have their own interests, but there is also common ground to be found," says Rutger Zuidam, from Odyssey. "This is where common interests meet. The point is not to reach a consensus or to divide the pie, but to arrive at something new by doing it together." It is

therefore important not to start working together for profit in the first instance, but to invest in *common ground*. But ensure you have a long-term focus.

Funding vehicles

Working together solely for profit is often based on a short-term impulse. For funding, other vehicles are available, such as subsidies and funds, as well as the Start-up in Residence programme, Odyssey Momentum, Cumulus Park Studio and innovation budgets including those provided by the Ministry of the Interior. Organisations looking for funding can make better use of these funding vehicles. Collaborations should commence with *in-kind* contributions and closed grants. In this way, the relationship between the partner organisations remains more balanced and there is no need to set up a financing structure initially.

Work from a *value case* or, where possible, a social cost-benefit analysis, and show what the benefit to society is. Dirk-Jan de Bruin of the Ministry of Infrastructure and Water Management says: "What we very often forget in innovations is the application. Technology is nice, of course, but it should be more about the value you can create together by using it. You need to keep this in mind from the start. You have to have a value case, actually a kind of business case at an ecosystem level in which you outline what the benefits of working together actually are. We started by creating urgency. This is the driving force that forces an early breakthrough. If we really want to break patterns, we have to start working together now. To do that, we looked closely at figures and definitions, so that you don't get into discussions about it later."

Create a sense of urgency. Make it real by also involving citizens and entrepreneurs. Think big and start small. At Modal Shift, they did this using a 24-hour co-creation session, explained De Bruin. "We sat down with the authorities and around fifty transport companies and shippers to see if they wanted to get involved. The focus was not on the institute or the kingdom, but on the social issue. By laying all your cards on the table, you ensure you achieve collaboration at all levels. The session was mainly attended by professionals who are in a position to push through a breakthrough in their own organisations."

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Investing in the right partners with support

Motivation, energy, and ownership are essential when working with organisations for a longer period of time. Having the right partners can make or break the success of getting a step further on a common task. Start where the energy is. It is better to start with a small committed group and expand later, than to attract parties with no motivation. Once cooperation has yielded its first results, others will be eager to join. Saskia Noordewier from The Hague Security Delta (HSD) advises: "Work hard where the energy is or in areas you believe in. Innovation is not always an easy process and requires perseverance. Don't start by trying to push water up hill, there has to be energy in the collaboration." Explore who the problem owners are and bring them together. Duyn from Cumulus Park Studio reinforces this: "The first phase of cooperation is about scoping and bringing together. Do this with the parties who own the problem and only involve the parties who offer solutions at a later stage."

Make sure that these parties then contribute to the content, as this creates a sense of ownership. Van Heukelom from DBC says: "The extent to which you are able to separate volunteering from non-commitment is, in my opinion, the strength of a collaboration. This requires commitment and support from the partners involved, their internal organisations and their supporters. Work on this at three levels: the administrative level, the management level and the people who are involved in the implementation. Several of the initiatives discussed require other people to achieve this. "SchuldenlabNL (Debt Lab NL) has a board made up of people from outside the organisations involved," says Sadik Harchaoui. "There are no parties in it, just individuals: Gerrit Zalm, Ingrid Thijssen, Ine Voorham and Ton Heerts. They are on the board in a personal capacity." "This focus on individuals also works for De Verkeersonderneming (The Traffic Company)," says Roger Demkes and Paul van Hal: "We continue to lobby organisations on the input we have. It remains people work. You have to play the right people until they eventually say, 'We're not going to wait for a national approach, we're just going to do it.' If we create this kind of atmosphere, then something will happen."

For long-term cooperation, it helps to make the ultimate benefits for partner organisations clear, however initially this should not focus on profit or paid assignments. Harchaoui from SchuldenlabNL says: "A party's self-interest in participating is well understood. We always say that it's about shared responsibility for shared problems. Make these shared problems and returns clear."

Tips for collaborative innovation, ownership and support

- Start with the problem owners, not with the parties who offer solutions
- Invest in a shared vision of the task
- Come up with a slogan and make a pitch together
- Repeat the pitch continuously both internally and externally
- Use administrative sponsors to maintain support internally and externally
- Make clear to the internal organisation and supporters what you expect the collaboration to yield

What can an organisation get out of engaging in collaborative innovation?

- Socially motivated: There are many companies looking to contribute from a social perspective because they are motivated to do so or because it supports the organisation's objectives. These efforts often fall under Corporate Social Responsibility (CSR).
- Cost savings: When the parties work together on a shared problem, the solution often contributes to organisational goals, and dividing the work can result in financial benefits. Collective Debt Management (a project from SchuldenlabNL), for example, provides participating organisations with substantial annual savings on personnel costs.
- Risk sharing: It can be attractive to work together because you share the investment needed to research and try something new. This is evident in the Al Coalition, for example. The cooperating parties carry out joint research and experiments. If an innovation fails, the costs of this risk are shared by working together.
- Good employment practices: Happy employees are better employees. Allowing employees to spend part of their time working together on customised projects keeps them engaged and inspired. But being visible to new talent is also an important element. For companies, it is an accessible way to get to know IT students who are about to graduate, for example, through the Workshop on Digital Expertise.
- Knowledge building: By allowing employees to participate in projects, they gain knowledge that can be applied in other parts of the organisation or in other projects. Partners in the Al Coalition and the Dutch Blockchain Coalition jointly build up knowledge about the possibilities offered by Artificial Intelligence and Blockchain.



- Broader network: If many parties are involved, a collaboration is an excellent place to build up a new network around a certain theme. But also to be visible within this network.
- Stronger image: Being recognised for the subject of the collaboration can strengthen an organisation's image. Cooperation with well-known leaders also helps in this respect. Contributions are therefore sometimes made from a communications perspective.

Investing in informal and formal cooperation

Anchor ownership and support in informal and formal cooperation structures. Make sure it belongs to everyone and remains so. If you want all organisations to have an equal role, make sure that a few large organisations do not dominate, make all the decisions, or keep everything to themselves. The Dutch Blockchain Coalition does this by letting the coalition council - and thus the members - make the important decisions. It creates a kind of direct democracy, in which everyone can have a say. This way, solidarity, trust and openness - hopefully - become part of the culture.

Think about ownership, liability, funding streams, the legal basis and organisational forms and record them. Do this only when the basis for trust and the relationship has been established. Harchaoui advises to, "start by convincing people, trying to understand resistance and self-interest. A feeling is created that this is fun, let's do it! Then comes phase two: what exactly are we going to do, and how, and what agreements do we need to put in place? What do we need? This all goes much easier when it revolves around a reward factor rather than obsessive competition. I am convinced that if the feeling, the will to work together and the reward factor are well organised in phase one, it's much easier to resolve any bottlenecks that may occur later."

Also make sure that governance supports what you want to achieve and which barriers you need to remove. Identify which parties you need now and in the future.

With this in mind, many of the collaborations we spoke to have expanded their advisory board or steering committees and complemented the founding partners with important stakeholders. The Green Valley has a Green Deal, a kind of *advisory board* that steers the content. Major stakeholders sit on the

board. These are important partners who get involved in innovations at an early stage and can thus help to resolve bottlenecks. These are parties who are curious about what they are doing and can ultimately ensure that laws and regulations support what they're trying to achieve. A balanced representation of all problem owners and actors is crucial. This can remove barriers and accelerate innovation.

In doing so, make sure that the relationship with financiers is straightforward. Sometimes a line of accountability about finances is better than a role on the board or supervisory board. At The Hague Security Delta (HSD), they learned exactly this during a gateway review: "A gateway review showed that we had to have a clearer separation in our governance structure. We now have a small Supervisory Board and an Advisory Board with a much broader focus. This makes HSD part of a broader group of people, because more people are involved, but you keep a clear separation." It is important to look carefully at the role that government parties have in the collaboration (financier, facilitator) and what role they play in the governance, so that they strengthen the collaboration and do not slow it down. (See also chapter on legal basis)

Investing in solidarity and fairness

For all collaborations, it is clear that openness, solidarity and honesty are crucial to their long-term success. Invest in a culture therefore, which allows interests, concerns and opportunities to be discussed openly. "In a large corporate you may have learned during your career that you achieve success by holding your cards close to your chest during negotiations." explains Irene Duyn of Cumulus Park. "But for collaborative innovation, this will kill it, you have to lay your cards on the table and be transparent about your intentions, interests and where you foresee tensions. If you suspect that parties aren't being totally transparent, use several meetings. The process of solidarity and honesty should not be underestimated and takes time. Invest that time in each other, to get to know each other, as individuals and as true partners in the collaboration.

Investing in independence

Sometimes it can help to have neutral ground or a neutral intermediary. A place to create distance from your own organisation or a party that facilitates innovation and cooperation. Wouter Welling from the Ministry of the Interior and Kingdom Relations acknowledges this: "When the government organises

something itself, there is always a hint of political interests or a client-contractor relationship. It therefore helps to have an organisation that is tasked with keeping everything as pure and substantive as possible to allow quality to come out on top. As a government, this is difficult to put in place, because you always retain certain power structures."

Half of the collaborations we spoke to chose to work independently through an intermediary such as ECP, Odyssey, Cumulus Park Studio, Society Impact or another external agency. The role of an intermediary can vary in nature; financial and administrative or focused on facilitating the innovation journey. They are often parties who have experience in supporting underlying group dynamics and making interests negotiable. "This is actually a kind of neutral territory, which is open to anyone who needs others in order to innovate. This is why Cumulus Park Studio is an independent foundation," explains Duyn.

Independence from one's own organisation can also be created by investing the funding elsewhere or distributing it among the partners. What forms have we encountered? Who controls the money?

- 1. In the case of a foundation or a private limited company, a separate entity is set up for the collaboration
- 2. One of the collaboration partners, other than the government
- 3. An intermediary such as ECP
- **4.** Distributed among the various partners

And when it's a success?

The twelve collaborations have all, in their own way, succeeded in making collaborative innovation work. The collaborations take scaling into account from the start. Scaling up can be done in many different ways: by level, by region, by target group, by number of stakeholders, by activity, or by making it structural. Think carefully about the desired approach to scaling up and involve the parties concerned in good time. Marjan Kreijns from The Green Valley uses the hop, skip and jump method: "It starts with a small idea in a lab or behind the computer, and eventually you want to roll it out on a large scale. You often do that in a pilot in the public environment. But in our experience, upscaling is much easier if you can test it in a safe environment first. This allows you to try, fail, go back to the drawing board and move on again. We provide that safe intermediate step. Ultimately it gets you much further than jumping straight to a pilot."

Have you been successful with a specific approach and could it be relevant to others? If so, make the knowledge and approach openly available. Help others with templates and guidelines. Again, remember that it remains a matter of human effort. A guideline doesn't roll itself out. Someone must accept the responsibility for scaling up and helping organisations to apply templates and tools. One of the parties involved or an intermediary can do this.

Scaling up from a test phase to a structural approach often requires change within the organisation. Arinda van der Meer of Start-up in Residence explains: "The internal organisation has to be ready for it. If you don't get them on board, with a bit of commitment from above, you know that people's time won't be freed up to support. And you need them." Don't forget the starting point of collaborative innovation either. Explain why the partner is needed, which social problem you're addressing and what it will bring to the organisation.

Tips from experienced professionals from 12 successful collaborative innovations

"It's mainly about the community feeling: That you really want to work together on something and have the feeling that you're going somewhere together." Sandra van Heukelom, Dutch Blockchain Coalition

"You need a value proposition
- a kind of business case at
ecosystem level, which clearly
outline what the advantages of
working together are. An initial
coalition of the willing is created
by starting conversations with
other parties."
Dirk Jan de Bruijn, Ministry of I&W

"Make your motives are clear: What do I want from this and why am I in it? A clear answer to this question prevents disappointments and frustrations, and also ensures that the people involved can properly articulate the added value of membership internally – i.e. within their company, knowledge institution or department/organization."

"Try, together with all parties, to arrive at a project that truly benefits everyone, otherwise it will have no added value." Sanne Borger, Workshop Digital

Craftsmanship

Peter Verkoulen, Dutch Blockchain Coalition

"You must be intrinsically ready to collaborate and prepared to be open about where things could potentially go wrong, or where conflicting interests could arise. In my opinion this has to be done at an early stage in order to provide a strong foundation."

Kees van der Klauw, Dutch Al Coalition

"Involve all parties from the start. This is what happens with us. From scientist to end user, you have to start the journey with everyone on board. This enables them to have their say, they become co-owners of the experiment, and can help solve bottlenecks along the way." Marjan Kreijns, The Green Village

"The most important precondition for a successful collaboration is the desire of the parties to work together. Then you can ask: What is the most practical way to arrange it?" Roger Demkes, The Traffic company (Verkeersonderneming)

"We have to unlock the 21st-century version of the polder model. When dealing with a problem, don't just look at who can solve it, but who can be jointly involved in the solution. The other party is crucial to solving your part of the problem." Rutger Zuidam, Odyssey

"My tip to civil servants is, if you dare to seek out unexpected encounters, things will be much more exciting than if you try and tackle a problem with people just like yourself." Wouter Welling, Ministry of the Interior and Kingdom Relations

"My tip to clients would be to, appreciate that collaboration — especially in the social domain — is essentially about human relationships. Human relations cannot be outsourced. This is a fundamental misconception." Sadik Harchaoui, Debt LabNL

"It's important to check whether there is energy, but you also need real genuine perseverance yourself. Innovation is not always an easy process, sometimes it just takes a lot of hard work. If you believe in something, you should go for it." Saskia Noordewier, The Hague Security Delta

"Ultimately, you shouldn't underestimate how much influence the internal organization can have. Startups need to work hard and have a good idea, but the internal organization must also be ready. You need commitment at a high level, as people's time needs to be freed up." Arinda van der Meer, Start-up in Residence, Municipality of The Hague

"If you are starting a Public-Private Partnership construction, I would particularly like to recommend that everyone should look for a sponsor. A high-level sponsor. It's like a trade association: You never do business with them, but you don't want to antagonize them. That also applies to Directors. Ultimately, they also have in-house expertise, so find it and ask for advice. Do your rounds. You shouldn't rush this." Diederik van Leeuwen, New Trust Foundation

"Essentially, it transpires that trust is the single biggest determinant of success for teams that innovate together. Especially for teams from multiple organisations that work on innovation. The people, their mindset and their behaviour: These are what make the difference." Irene van Duyn, Cumulus Park

Collaborative innovation from a procurement law and state aid perspective

Guest author: Alfredo Molina

External doctoral student at the University of Groningen

Innovation is not a goal in itself and there is no blueprint for how a partnership between organisations should look. Before parties enter into a partnership, they must first consider why they want to be in a partnership and what they want to do with it (what's in it for me?) and in addition they must think about what role they want to play in the partnership?

A partnership involving government participation takes on an extra dimension. In a democratic state governed by the rule of law, we expect the Government to be able to justify its actions to its citizens, and clearly explain why certain decisions were made. We expect the Government to spend our taxes effectively. We also expect the Government not to discriminate and to act impartially. Anyone with the same good idea should have an equal chance of being supported by the Government. Randomness and favouritism are out of the question.

Europe also has the same expectation of governments. In addition, the horrors of the First and Second World Wars had a devastating impact and European countries realise that they must do everything in their power to prevent another war. To keep the peace, the European project set up by Monet and Schumann in the 1950s led to today's European Union over 70 years later. The primary goal of Monet and Schumann was the preservation of peace by making the economies of countries mutually dependent on each other. Under the adage, Countries that trade with each other have an interest in peace", trade in a common market should ensure lasting peace. Integrating economies leads to improved prosperity for Europeans, which In turn reduces the likelihood of a new war on the European continent. Prosperity is increased by promoting employment, guaranteeing adequate social protection, combating social exclusion as well as a high level of education, training and protection of human health. The fight to end discrimination on grounds of nationality is essential for increasing prosperity and the prevention of future wars.

Based on the above, principles such The Duty to Give Reasons, and the principles of due care, non-discrimination, objectivity and transparency were born. Principles that we as a society believe the government should abide by. Frameworks, whether they come from Europe or from our national government, are inspired by these principles.

This chapter shows that European legislation and regulations, such as procurement law and state aid law, should not be seen as a burden. Substantive choices and consideration of why certain objectives must be achieved or why investments must be made in a certain project or why the government must participate in a certain partnership, are grounded in the regulations of the national, central or decentralised government. These laws and regulations only impose an obligation on governments to make their choices and considerations transparent, objectively substantiated and understandable. Our democratic constitutional state requires our government to be transparent about the choices and considerations that have led to a certain decision, such as the decision to participate in a partnership or the decision to spend money on a project. Only then can citizens monitor and hold the Government accountable and prevent it from making decisions based on arbitrariness and discrimination.

Role of Government is leading

To start, it is good to consider what kind of partnership should be established between a government body, a semi-government body and a private party, be it a municipality, a university, a foundation or a software supplier. What role does the Government play within this partnership? What became clear from the interviews was that a partnership between government, industry, academia and other parties does not always lead to governments assuming the role of commissioning authority. On the contrary, governments are often expected to play a facilitating role rather than a leading role. For partnerships I identified different characteristics that determine the scale:

- 1. Numbers: From a select group of partners to a broad network of participants.
- **2.** Degree of commitment: From light-hearted agreements to institutions.
- 3. Dynamics: From an open network to a closed group.

The role assumed by the Government is the starting point for determining the legal design of the partnership and the legal instruments that will be used. A government that sees itself more as a stimulator will choose other instruments to give form to its role than a government that sees itself more as a commissioner. A government that sees itself more as a stimulator, for example, will make more use of subsidies, or will provide loans or guarantees to a private party, leaving the initiative with that private party. A government that sees itself in the driving seat will probably contract a private party as the contractor. This party will then carry out a product or service on behalf of the government under specific conditions, drawn up by the Government.

The role that the Government assumes ultimately determines which jurisdiction is applicable. A government purchasing products and services or signing a contract with a contractor, will have to take procurement law into account. In all other cases, the government will have to take state aid law into account.

Procurement law vs state aid law

Procurement law

Within procurement law, a dividing line is drawn by the 'for pecuniary interest' concept. In a partnership in which the government acts as principal vis-à-vis an entrepreneur for pecuniary interest, procurement law will apply. A title for pecuniary interest is a reciprocal consideration between the government and the entrepreneur. An obligation on the part of the Government to "do something" (often in the form of a payment, but also the granting of an exclusive right) in exchange for the company also "doing something" in return in the form of delivering a specific performance. If this obligation is not met, the parties will demand compliance. In other words, one of the parties will force the other party to perform this specific service.

The title for pecuniary interest is at the heart of procurement law. Without this element, procurement law does not apply. This is also the reason why procurement law does not apply to partnerships in which the Government cooperates in another way. For example, if the Government shares knowledge, acts as guarantor, grants a subsidy or provides a loan. In these forms, the fulfilment - the delivery of the performance by the other cooperating party - is not central. In these forms, parties can break up without one of the parties being forced to deliver the product. Subsidies can be withdrawn, knowledge sharing can stop, the loan can be stopped, the licence can be withdrawn, or the guarantee can end.

Check whether you are purchasing something and as the client, enter a contract with the contractor, or whether you want to stimulate something, for example, through a subsidy scheme.



State aid law

State aid law has different conditions to procurement law. It is prohibited for the government to provide state aid to a market player unless an exception is granted.

In order to assess the existence of state aid, authorities will consider the following criteria:

- 1. The aid is granted by the State or through state resources. For example, knowledge sharing is not an activity that is financed through state resources.
- 2a. The beneficiary is a company.
- **2b.** The aid measure favours certain undertakings or productions (selectivity criterion). *In many of the initiatives discussed in this publication, one sees that a particular company is not selectively favoured. Indeed, new parties can join the initiative at any time.*
- **3.** Advantage is given in the form of an economic advantage which an undertaking would not have received in its normal course of business.
- Aid must lead to a distortion or threat of distortion of competition in the common market.
- 5. Interstate trade must be affected.1



Check your situation against the above criteria. If it does not meet all requirements, it does not constitute state aid and is therefore permissible.

The European Commission has written several Communications² on the above criteria. These Communications provide practitioners with information on how to design their projects, taking these criteria into consideration, to avoid measures being qualified as prohibited state aid.

If state aid is involved, this does not necessarily mean that measures are prohibitive. Some state aid is allowed on the basis of the General Block Exemption Regulation (GBER)³ and if the GBER does not allow it, approval can still be requested from the European Commission.

Does it fall under the General Block Exemption Regulation?

The GBER provides sufficient possibilities to grant aid, especially for innovation. The GBER focuses on aid to small and medium-sized enterprises (SMEs); for example, aid to provide training for SME staff and aid to promote employment. Aid can also be granted to large enterprises, but only in certain cases and under certain conditions.

When granting State aid covered by the General Block Exemption Regulation, the two applicable aid ceilings should be taken into account: The aid intensity and the aid ceiling. If the level of aid exceeds the ceiling, it must still be notified to the European Commission. The aid intensity is a percentage which is related to a set of eligible costs. The aid ceiling is the maximum amount of aid that may be granted per activity.

The level of the ceiling is determined according to the size of the company and the activity. For a medium-sized enterprise wishing to invest in renewable energy infrastructure, the aid intensity is 100% and the aid ceiling is 20 million. While for a medium-sized enterprise wishing to invest in employment, the aid intensity is 10% and the aid ceiling is EUR 7.5 million.

The legal form of a company is thus irrelevant for the maximum amount of aid.

It is the same for a foundation or a private limited company. However, a distinction is made between small, medium-sized and large companies. The substantive activity to which the aid measure contributes does have an influence on the maximum aid ceilings.

Barriers

Despite the fact that state aid law offers a number of possibilities for innovation in partnerships, obstacles are often encountered when applying state aid law.

- 1. State aid law is fairly static and assumes that governments know in advance what they want and can anticipate what is going to happen. In the case of innovation in particular, developments can be rapid. If a lot of time is spent considering the options, the speed of innovation can leave you behind.
- **2.** The process of justification is seen as an administrative burden. Moreover, it is not clear how detailed and how far the justification should go.

3. Cooperation between the policy officer and the jurist is required for a solid and conclusive justification. Interdisciplinary cooperation has to be organised, to enable the legal expert to indicate the framework and the policy employee to substantiate why an appeal to a certain exception is permissible. This is a time-consuming process, which can cause delays in rapid innovation.

Summary

Collaborating with the Government means that parties must recognise that the government is bound by these principles. These principles assure us that a government respects the democratic value of our rule of law.

But it is ultimately the parties (including the public authorities) that choose with whom they want to enter into a partnership and how they shape this partnership. The type of partnership chosen will determine which jurisdiction applies: State aid law or procurement law.

TIP 1: Consider what kind of role you expect the government to play. Do you want to be able to deliver something that is enforceable by contract? Then the Government is the principal. Otherwise, the government is expected to play a different role.

TIP 2: As a government, check whether you comply with the criteria. This prevents state aid. More information on these aspects can be found in various communications from the European Commission.

TIP 3: If, however, there is state aid and Communications of the European Commission offers no solace, follow the conditions of the General Block Exemption Regulation (GBER). The GBER exempts certain forms of state aid from prior notification to the European Commission. These can therefore be implemented immediately.

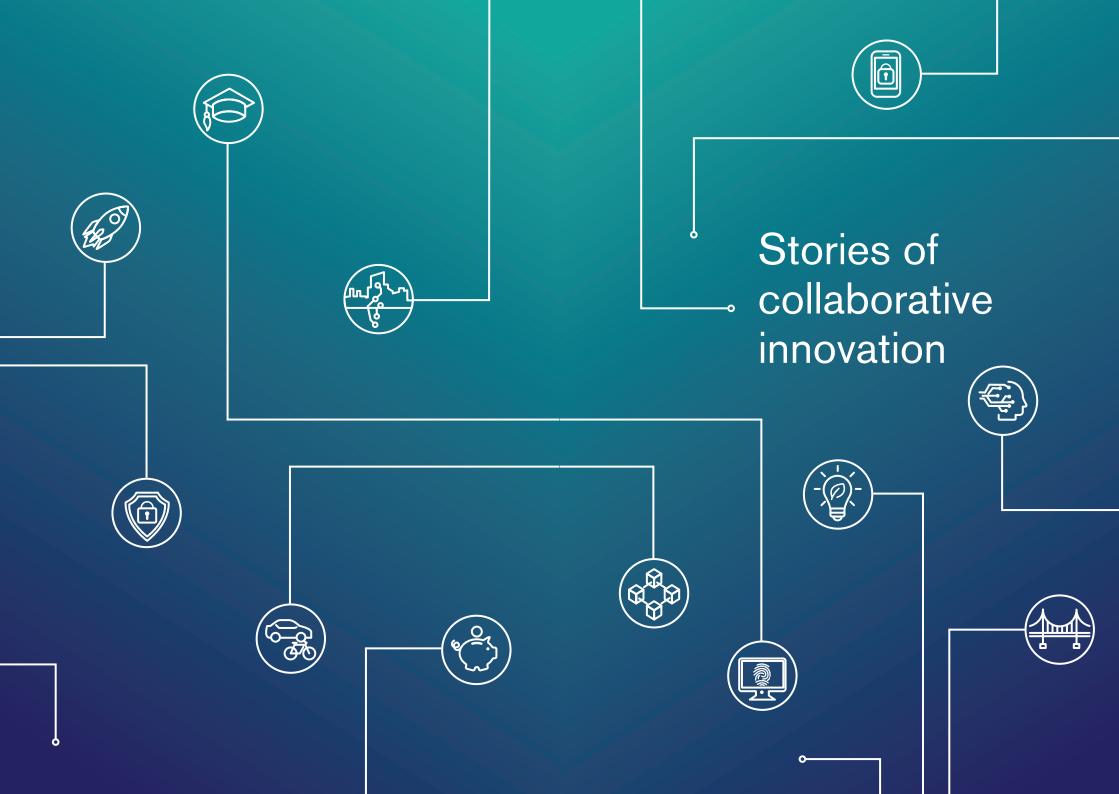
TIP: Engage a lawyer on time. This avoids having to wait until late in the process to present justifications that may lead to a certain measure being labelled as prohibited state aid, when it could perfectly well have been exempted under the General Block Exemption Regulation.

Alfredo Molina, from the University of Groningen (RUG), is doing his PhD at Digicampus on the subject of 'innovative procurement'. He is examining the question of whether there is sufficient room for governments to procure innovative products and services within the existing procurement law.

^{1.} Article 106 TFEU Altmark judgment, Case C-280/00 Spain v Commission, Joined Cases C-278/92 and C-280/92, I-4103

^{2.} Communication on State aid C262/1

^{3.} European Commission Regulation (EC) No 800/2008 of 6 August 2008 declaring certain categories of aid compatible with the common market in application of Articles 87 and 88 of the Treaty (General block exemption Regulation)



Providing space for collaborative innovation

Irene Duyn Cumulus Park Cumulus Park facilitates collaboration and innovation. A brand-new innovation district in Amsterdam-Zuidoost will be jointly developed by ING, Amsterdam University of Applied Sciences, ROC van Amsterdam and the Municipality of Amsterdam. Irene Duyn, programme manager, talks about the innovation infrastructure that they are establishing together with a variety of innovation partners.

"Collaborative innovation is innovation that you can't do alone, that needs to involve others. Digitisation and technology have made the world so much more complex and intertwined that parties are increasingly dependent on each other, and innovation is no exception. For technologies such as blockchain or distributed ledgers it is even necessary for all parties to participate in the chain if you want to build solutions. But organising this is not so easy, which is why the desire arose to have a place which offers all the knowledge and facilities to make an "innovation ecosystem" work with ease: Cumulus Park.

"We see that many collaborations in the field of innovation are fraught with difficulties and ultimately do not lead to the desired progress because too little attention is paid to underlying group dynamics and interests. Or because there are different levels of knowledge and experience in the field of innovation. Innovating is already quite a challenge if you do it within your own organisation. If you do it in cooperation with one other party, it is already more complicated, but what if there are several stakeholders? Working with three or four parties, for example? Then it can become extremely complex, particularly if you approach it in the same way as you would in your own organisation.

Room for balance

"To succeed with 'multi-stakeholder innovation' there must be room for all interests, regardless of, for example, the size of the financial contribution made by a certain party. In this way, balanced trust between all parties can be achieved and win-win-win solutions can be worked towards. Because these are proven factors for success and resilience in an innovation project.

"There must be room for all interests, regardless of the size of their financial contribution."

"But how do you do that? Who organises the collaboration? How does the whole process work? We often see, for example, that the largest party likes to assume a dominant role and thus sets the agenda for the entire process, mainly from its own perspective. One of the lessons is that in multi-stake-holder collaborations it is important that all participants are equal and that it helps if the location and process management are organised by a party that has no interest in the project. Cumulus Park therefore offers a neutral territory, open to anyone who needs others to innovate together. We are now setting up an independent foundation, Cumulus Park Studio, to provide the innovation infrastructure.

Getting target groups to interact

"In addition to innovation programmes, we are also working hard to develop a physical area in Amsterdam-Zuidoost. The municipality is willing to co-invest in this area to make it more sustainable. For many years it has been regarded as quite a drab area with lots of concrete and buildings. Years ago, it wasn't always safe and for many people that is still the perception they have of this area. We are now working hard to make it green, get rid of the concrete and add a human dimension. We have to ensure that it is a pleasant and enjoyable environment, but also that all of the target groups walking around here, meet, find and interact with each other.

"Twenty thousand people a day visit the area: students, (young) professionals from the business world, entrepreneurs, local residents, and people who come for the shopping centre. It's very diverse. The desired development requires close cooperation and support from the municipality. Their investment in the area has very concrete terms. One condition is that we ensure cooperation with all stakeholders involved and develop the innovation infrastructure. Together, we will attract businesses to the area, ensure that investments are made in collaborations between companies and students from both the ROC and the University, and that we establish links with other parts of Amsterdam.

Collaboration topics

"In order to achieve collaboration between parties, it is important that you are relevant to each other in terms of content. It is therefore important to be explicit about which topics are important focus areas for the ecosystem.

"We have researched the major themes that will confront society over the next ten or twenty years, subjects that will have a major impact on society and therefore, of course, on organisations and companies that will have to find solutions for them. Whether you look at the UN Sustainable Development Goals, reports from the World Economic Forum or the EU, the major issues are the same. We have chosen topics that are relevant for Europe, the Netherlands and the Amsterdam region over the coming years. We then considered the obvious actions to take here in this specific district. Building a new, high-tech campus when one already exists in Eindhoven has little added value. The most important criterion was perhaps the topics that require collaboration on innovation.

"In the end, we came up with three topics: 'digital identity', 'urbanisation' and the 'future of work'. We will focus on the first two in the near future. We are now in ongoing dialogue with organisations and companies to learn what their most urgent issues are and where they need support from others. This is how we work: Demand-driven.

"To engage parties in collaboration it is important that the content is relevant for everyone involved."

Transition through collaboration

"Cumulus Park Studio was initiated by ING, when the bank noticed that existing ways of working were inadequate for dealing with certain challenges. Big trends like platformisation and technologisation were driving new issues requiring different solutions. For example, as a bank, how do you attract talent that is interested in tech, data and creative fields but not necessarily triggered by the financial sector? And how do you deal with fundamental fintech developments? First, these were small start-ups with the potential to take a small piece of the pie. Today, large parties, such as Apple and Google are also entering the market. "You could react very defensively to this, but in fact it turned out to be based on a much broader development: the boundaries between sectors are blurring

"The boundaries between sectors are blurring, while technology is enabling you to develop business models that extend beyond your own industry."

while technology is enabling you to develop business models that extend beyond your own industry. For six years ING has been saying: 'we are a tech company with a banking licence, rather than a bank that uses technology.' But to really make that transition you need very close cooperation with other sectors and industries. Then ING discovered that this is becoming a much broader development and affecting many sectors. For this reason, two years ago, ING took the initiative to start an open innovation ecosystem that is accessible to all. The bank is confident that, like the other participants, it will benefit in the long term from being part of that ecosystem.

"If we really want to make Cumulus Park prosperous and inviting for everyone, ING will have to 'let go'. This is why a separate entity is now being set up; a foundation that represents the interests of all participants and not just ING. The long-term vision for a flourishing ecosystem is leading. We are also looking at what is needed to break down the physical barriers in the district. This literally means breaking down fences, relocating paths and installing signage that uses a common visual language so that all buildings feel part of the same ecosystem and refer to each other.

Open ecosystem

"We are still investigating how best to structure the organisation. We want to be a truly open innovation system, and therefore avoid, for example, a board that only promotes the interests of the largest investors or that might exclude the competitors of the organisations involved. That could damage the openness and effectiveness of the ecosystem.

"You can start with a number of companies and investors, or you can look for a group of good directors who can add value based on their network and expertise. Following the development phase, another scenario is to attract funds and subsidies to finance part of the start-up to have the foundation generate sufficient income to be able to continue to cover its costs. ING is an important player here, but you need several partners to guarantee neutrality and independence. Figuring it all out is guite a puzzle.

Co-creation: collaboration in three phases

"In addition to facilitating existing innovation and collaboration models, such as accelerator programmes aimed at start-ups and scale-ups, we are also developing new programmes. These range from the joint exploration of new technologies and trends, to the accelerated retraining of co-workers to data and tech profiles. One of the most important programmes is a blueprint for multi-stakeholder collaboration. This innovation process often already existed in the context of government and research but is now becoming an increasingly important form of innovation in business and public-private partnerships. Roughly speaking, this process consists of three phases:

- 1. The first phase is to scope out the problem and bring together parties that are experiencing or want to solve a similar problem. In this step it becomes clear if organisations really have the same problem and collaboration is relevant or if they use the same words, but the underlying issue is substantially different. This is where you refine the issue and scout possible collaboration partners who are important for investigating possible solutions. This is done via round tables where more depth to the content is sought. Sometimes it might be identified that a specific type of partner is missing from the table and needs to be added.
- 2. The second phase is the partnership assessment: in just three short sessions you find out whether you have pulled the right team together and what exactly the team is going to work on. Here, you work on a shared vision of the future that you want to work towards. Often, parties already have an idea in their heads that they have become attached to. That's why it's good to do it again with the whole team, as sometimes very different options come out of it. In this phase, you make sure that the most important issues have been dealt with, so that each party can decide whether or not they should get involved and with what level of investment.
- 3. The parties that choose to join continue with the third phase: incubation of the partnership. In this phase, they will develop the vision of the future which they committed to in phase 2. This includes testing prototypes, but it can also mean that the lessons learned in the process send the team in a different direction than they had initially thought. In this phase, it can help to have a neutral workplace, i.e. not in the office of one of the participants but shared temporary space where everyone can work on the project. Cumulus Park can also assist with this.

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Trust

"In the end, it turns out that trust is the single biggest determinant of success for a team that innovates together. This already applies within an organisation, but it is of even greater importance in teams that work on innovation from multiple organisations. It is the people, their mindset and their behaviour that makes a difference. Other things also help, such as having sufficient budget, the right technology, the facilities - but these are peripheral to the team dynamic. The big driver of our co-creation process is building trust. In your careers with a big corporate you may have learned that you achieve success by holding your cards close to your chest during negotiations. But this kills 'collaborative innovation'. You have to dare to lay your cards on the table and be transparent about your intentions, interests and where you foresee tensions. This sometimes feels counter-intuitive, which is why most teams will not do it of their own accord. This is why the process as well as the facilitator are of great importance: Is he or she able to coach the team in this and expose the important issues at the right moment and in a way that is constructive? This is the key question in multi-stakeholder collaboration and innovation."

> "Ultimately, it turns out that trust is the greatest determinant of success for teams that innovate together."



Collaboration based on trust

Sadik Harchaoui SchuldenlabNL

"There should be less tendering in the social domain due to complex regulations," says Sadik Harchaoui of SchuldenlabNL. "Instead, there should be more collaboration based on trust."

"Start with the issue, an ideal or ambition, a dot on the horizon or whatever you want to call it. In our case, the big ambition is to make The Hague debt free (with Schuldenlab070) or the whole of the Netherlands debt-free.

"You then create a story together, based on a number of preconditions: what you are going to do together must have a social impact, you want your projects to become financially sustainable, the collaboration must be in the best interests of the participating public and private parties, but it must be also be in the public interest. And it must achieve this from the citizens perspective.

"A debt-free Netherlands, for example, is in the interest of all citizens, participating parties, but also in the public interest. It has an impact because it gives people a better perspective. At the same time, it also reduces unnecessary costs for society as a whole. The ideal scenario is that projects can then be scaled up. Projects that are game changers. With this you bring the ambition or the ideal a little bit closer.

Charm and convince stakeholders

"In phase one, you meet the stakeholders to get them onboard and inspire them. Show them that it can be done differently, that good examples exist and convince them to join you on the journey towards the dot on the horizon. Use charm and persuasion and perhaps most importantly listen carefully to their interests. It is always tailor-made and requires diligent work. This also applies for SchuldenlabNL. How we going to do it all is still not quite clear. It's a quest. Not one based on frameworks or checklists. Stimulating a cooperation between many parties, connecting them to the broader picture brings a lot of variation. If you want to innovate, you need all these different perspectives and it takes time to embed them in a complex social domain.

"Begin with the issue, an ideal or ambition, a point on the horizon."

"There are a few essential ingredients for a strong collaboration. First of all, stakeholders must have an intrinsic motivation to do it together. You have to look each other in the eye and say: 'We are going to do this together and we will solve practical problems along the way! In addition, you need to have trust in each other, in someone's intentions and motivation, but also trust in an organisation's qualities and competences. And a basic trust that you won't jump ship if things get tough. Finally, there must be the desire to actually provide input, such as money, knowledge or expertise. Personally, I don't think you should start with endless discussions about covenants, letters of intent and what you expect from each other. In this manner, you start on the basis of mistrust. Let it come about, give each other space and the right moment to step in.

Appropriate stakeholder agreements

"You start by convincing people, trying to understand resistance and self-interest. A feeling of fun is created - let's do it! Then comes phase two: what exactly are we going to do, how, and what agreements do we need to make? What do we need? This all runs more smoothly when there is a reward factor and no obsessive competition structure. I am convinced that if 'the feeling', the desire to collaborate and the reward factor are well organised in the first phase, it's much easier to solve problems along the way. Competition and rivalry between interests and organisations can also be a good thing, but the moment it becomes too dominant, you will no longer grant each other anything and cooperation becomes much more difficult. Each communications department then goes for its own piece in the newspaper. This is why it is better to make agreements in phase two.

"Personally, I don't think you have to fit a certain mould. You need to look at what each stakeholder needs. How do you enable someone to jump through the organisational, managerial or financial hoop? We have partners who make financial contributions or provide capacity with and without an agreement. There are partners who don't make financial contributions but with whom we do have an agreement. Not all partners can offer the same contribution, such as the tax authorities or a housing association. But they make knowledge and expertise available, or capacity, or make their location available for meetings. Variation means that not every partner has to do the same thing and an equal partnership is created on the basis of added value.

The relationship between public and private

"With most public innovations, the (semi) government is almost always at the creation. SchuldenlabNL is also the result of a public-private partnership. Clearly, a private party is not going to ensure that a family with multiple problems receives integral help. A private party is not going to provide housing for the homeless. That is not their role. But they do have a joint responsibility, because ultimately it is also in their interest. If the homeless have a bank account and start working and get a decent roof over their heads, then that also benefits the banks and the housing corporations. This is why we say it is about shared responsibility for shared problems. It may not seem like it at first, but if you look more carefully at the effects of problems in the social domain, it almost always is.

"Private companies also get something in return when they enter into such a partnership. For example, we work together with Deloitte, which has made an entire team available to measure the impact of the collaboration and to help scale up projects. If you express this effort in financial terms, it clearly amounts to hundreds of thousands. But on the flip side, they are involved in a

great cause - a real social return that can be made visible.

You also see that their own people, especially the young professionals, increasingly want to work for companies that do something that has a positive impact on people's lives. Something that really makes a difference. As a result, their employees may stay with Deloitte longer, because they are given the opportunity to apply their tremendous knowledge and expertise in a different way. Finally, SchuldenlabNL is a very strong brand. Queen Máxima encourages us and participating partners to intensify collaboration, and accelerate and scale up the best projects. That gives us energy. The free publicity for participating partners also has a value.

"It's about shared responsibility for a common problem."

Tenders in the social domain can be a perverse incentive

"In public-private partnerships aimed at innovation and cooperation, tendering is a very awkward instrument. In my experience, nine times out of ten, the most suitable parties from the social domain, the parties who can innovate and achieve results, do not participate in tendering processes. They think it

takes too much energy and their organisation is not equipped for it. Most innovators are not well-oiled tendering machines; their concepts never fit directly. During the joint exploratory phases, ideas, proposals and business cases are shared to achieve a shared common interest. This often means that innovators work for months on something and are then told at the end of the process that they must participate in tendering processes for their own projects. Often, these projects are awarded to other organisations that had no part in the 'preliminary work', simply because these organisations have a very good understanding of the tendering process. This makes tendering 'survival of the fitting' instead of 'survival of the fittest'. Ideally the party who truly does things differently in the social domain should be able to do them.

"My advice to clients would be to realise that collaboration - particularly in the social domain - is essentially about human relationships. You cannot outsource human relationships. That is a fundamental error. Take childcare. It's not just a building with employees. It's fundamentally about the care and educational relationship that develops between the carers and the child - a human relationship. The same applies to care for the elderly. You cannot contract out the relationship between an elderly person and their carer. It's about love, security and respect. I could name many more examples. The same also applies to debt counselling. People who are in debt don't just have

debts, but stress, uncertainties and other problems. Helping these people in a good way is not only a question of the best

tools or the correct application of rules. It's about trust between care worker and client, dealing with vulnerability and the desire for a better perspective. If you realise this, you become much more creative and are able to come up with arguments for doing business, or not doing business with a specific party, and why you will or will not put a particular project out to tender. Tendering has now become too much of a system - a means to an end. Fortunately, a growing number of parties are looking at how things can be done differently in this area."

"You cannot outsource human relationships."





Collaboration is not without obligations

Kees van der Klauw Nederlandse Al Coalitie If this not already the case, Artificial Intelligence (AI) is set to impact all sectors. "Many parties face the same issues, so it would be prudent to tackle these together," says Kees van der Klauw, coalition manager at the Dutch AI Coalition (NL AIC). Afterwards, companies can then compete with their best propositions.

"We believe that you should think much more integrally. Meaning, from the science perspective as well as the application. We are now trying this at NL AIC. There is a lot of enthusiasm to participate as people realize that this is of enormous significance to the Dutch economy and society. An increasing number of business models are shifting to data-driven business models.

New competitors for many companies are no longer emerging from within their own sectors, but from the ICT and data sector. Just look at Booking.com or Dutch take away service, Thuisbezorgd, which have enormous effects on the economy. If you want to continue to support the earning capacity of different sectors, then they must start working with new technologies. The starting point of the Coalition is to encourage different sectors to do just this. We are supported in this by the ECP, a platform for the Digitisation of Society. They host our administration and maintain records of contracts with participants.

"The coalition started with a task force made up of people from the Government, academia and industry. From the Ministry of Economic Affairs and Climate (EZK), VNO-NCW, Dutch digital delta, a professor at Delft Technical University, Philips, Ahold Delhaize, IBM, Seedlink and TNO. They put their heads together and said, "We have to organize something for the Netherlands because Al is so important that you simply can't let it run its course. And all those fragmented activities simply don't work.

"The starting point for the coalition is to motivate different sectors to get on board with new technologies."

From triple helix to quadruple helix

"A triple helix involving industry, government and academia already existed. We then said that this should be quadruple helix, with the involvement of society or end-users. Citizens must be involved.

Because you can't offer this kind of technology once it's finalised, you should already involve social representatives and end users in the design phase. You can see this right now, for example, in the discussions about privacy and security.

"We have published position papers to delineate the steps and to indicate the urgency. These were presented to the government. After that, an action agenda was drawn up with exactly what we need to do.

Governance model

"Our governance model consists of three layers but works very simply. The core of NL AIC is formed by working groups for the building blocks and application areas of Al. Activities take place within these working groups and between working groups. The working groups come together in the Programme Team where we learn a lot from each other.

The strategy team emerged out of the task force. The strategy team has a policymaking and monitoring role. Low frequency, they meet a couple of times a year. And then we have administrative support, known as the Coalition Desk.

"We have a governance model, but as yet, no funds. The Ministry of Economic Affairs and Climate Policy provided a subsidy to organise the process, but at the moment we are not a party that distributes money. We are organising the joint building of knowledge and ensuring that resources will be available in the future. (On 25 June, the Ministry of Economic Affairs announced a kick-start subsidy for NL AIC). We then want to put together a programme agreement based on the strategy and, using a careful process, select the best proposals for financing. And then make adjustments to projects along the way.

"We know that this technology has a huge first mover advantage. Those who become the first to train Al algorithms, build a huge skills lead that later entrants will struggle to catch up with. Al is a self-reinforcing technology which means the first players reap the greatest benefits, and that is what really sets it apart from other technologies. We therefore believe that a new structural investment is really needed to put AI on the map in the Netherlands.

Not optional

"The coalition requires "The Coalition requires a firm commitment from all parties, it is not optional. We have collaboration agreements and a code of conduct for the parties participating in the coalition. They need to agree to a couple of rules: Show commitment and represent common interests. Everyone has starts working on the basis of common interest. We also expect the government to make an investment - new money that is not already intended for other digital issues. Companies make their commitment, of course they must be able to transparently demonstrate that they are employing people for Al and that they are starting AI projects with this funding.

a firm commitment from all parties, it is not optional."

Collaborating on common problems

"The basis of our collaboration is that we tackle common problems together. There are enormous gains to be made if we can prevent everyone solving problems individually while someone may also be working on them just a few kilometres away or may have even already solved them.

"We have organised these common issues into five working groups - horizontal building blocks. Collaborations are almost always public-private, with the government playing an important role. You often see that governments are able to take the first step, which then makes the business community join in. The working groups are focussed on developing and retaining tech talent. knowledge building and retaining a strong European position, data sharing and how this can be supported in practice and, finally, the involvement of citizens.

Competing with propositions

"Of course, competition between companies in the Coalition should remain possible. But if everyone were to solve the same common problems on their own, that would have significant financial implications. For example, many companies are struggling with how to apply the GDPR's privacy rules in their business. In this case, it is better to solve this as a common project so that the companies can continue to focus on making the very best algorithm - this is an area they can compete in. We want to ensure that the Netherlands, as a whole, uses the knowledge, skills and resources in common fields as

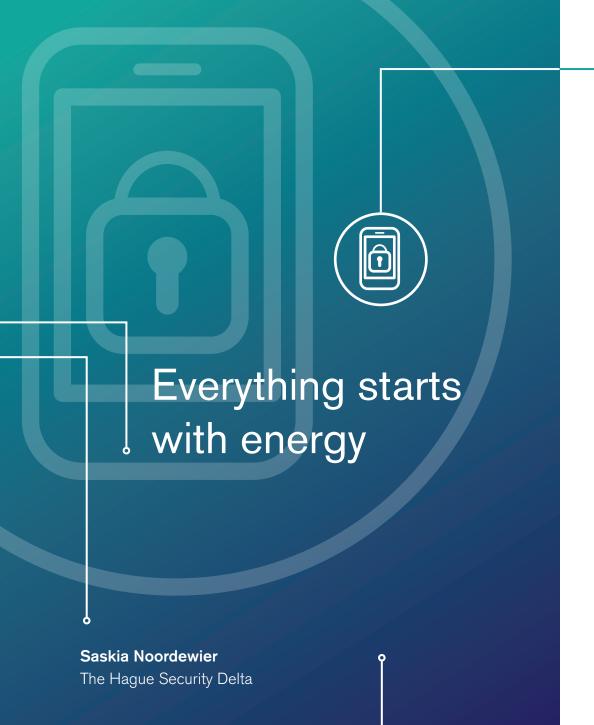
efficiently as possible, so that those companies can then compete with their best propositions.

"We say clearly in the agreement that if you have things you don't want to share, don't mention them. In the Coalition, we try to avoid complex arrangements for intellectual property. Of course, when projects get under way, agreements are put in place, but not in the Coalition, where the rule is to bring your common issue and discuss it openly with your colleagues or your competitors or partners in the chain. It is the companies' responsibility not to report things that are confidential.

"You have to have an intrinsic desire to work together and you also have to be prepared to tell each other where things might go wrong or where there are conflicts of interest. You have to do that early on, and then I think you have a good basis."

"Of course, competition between companies in the coalition must remain possible."





Making the Netherlands safer, while at the same time increasing economic growth and jobs. This is the mission of the National Security Cluster, The Hague Security Delta (HSD). In cooperation with governments, businesses and knowledge institutions, they act as an important link to increase access to (local) talent, knowledge, capital, the market and innovation. Saskia Noordewier, manager of the Innovation Team at The Hague Security Delta, explains how they manage it.

"The Hague Security Delta is a network of companies, governments and knowledge institutes with a common goal: to work together towards a safer world, with more economic activity and jobs as a spin-off. In our network, parties share their knowledge and security issues in order to develop innovative solutions in the field of cybersecurity, national security or the safety of cities and communities. This all comes together on our campus in The Hague.

"For us, everything starts with energy. This is a prerequisite for accepting a role in the innovation process. Because if there is no energy, it makes no sense for us to start the journey. We may have an idea that could lead to something, but if nobody walks with us, it's no use. Other conditions for us include a sound business case, a problem owner and a major security aspect. The exploration stage is so important for us as it enables you to dig deeper. After this we are able to play a number of different roles in projects: facilitator, connector, network director, booster or communicator.

"During the exploration stage, there are no ground rules about who can or cannot participate. We call it pre-competitive market exploration: we put people in a consortium and put them in contact with a client or requesting party. It is then up to the ultimate contracting authority to decide who gets the contract or not. We do not make that choice.

Sharing

"Our primary drive is to share knowledge between governments, the business community and knowledge institutions. Because without knowledge, there is no innovation. It starts with an issue with a security aspect. We then inventorise

the situation at different organisations, from different sectors, to see what roadblocks they're facing.

We carry out interpretation studies to explore a subject in depth. Next, we organise a round table with a limited group of people involved to see what they think of the study and whether they see any opportunities for innovation. After that, we continue with an HSD cafe, where you explore a subject further. We come together with a larger group to investigate whether we can proceed further with an innovation. If it isn't possible, then we will close it after the exploration. But if it works, a full programme will be developed as a result. All of this happens under the umbrella of the 'HSD innovation model'."

Concrete question or recognition of a need

"The issues we deal with often have varying origins. It may be a very concrete question, as was the case with our collaboration with the Ministry of Defence, who said: 'We would like an open source data diode that is cheaper, so that more companies and people at home can use it. With this we can contribute to the digital security of the Netherlands'. First, we brought parties together and tried to find organisations that the Ministry of Defence would not normally bring to the table. We also encouraged them to talk to parties on a one-on-one basis, because they are, after all, competitors. They're unlikely to be completely transparent in front of other parties. We guide the process, but the Ministry of Defence itself decides with whom they will work. We are neutral in that respect. With this process, we can really create a new market – the Directorate-General for Public Works and Water Management is now also looking at diodes.

"But it may also be the case that we ourselves identify a problem, for example in the case of Smart Cities. We saw many initiatives, but also noted that they weren't scalable and that municipalities were struggling with the approach. We therefore decided to write a report on the theme, to get things moving. We then brought the parties together - governments, industry and knowledge institutes. In this instance you aren't responding to a specific demand, but to a need.

Investment pays off - but not always immediately

"Financing our work is not so straightforward. Funding is provided by a variety of sources - some from our partners, some from the municipality of The Hague, some from the province of South Holland. We also take part in subsidy projects for funding. This does not necessarily mean that we lead the

project, but sometimes, because we know our partners well, we can link a subsidy project to partners and match them with an organisation. And in some instances, if you have invested in a programme for some time because you truly believe in it, but for which there is no funding, then you have to go for it.

"Financing our work in not so straightforward. Funding is provided by a variety of sources."

"In addition to innovation programmes, we also deliver added value by providing our partners with access to 'knowledge' through our cross-sector CISO inter-vision meetings, HSD Cafés, studies and website, among others. Access to 'talent' via our Security Talent portal and Cyber Security Summer School. Access to 'markets' via network meetings, our contributions to trade missions and Partners for International Business. Access to 'capital and finance', with the HSD financing guide and our contribution to the establishment of the Dutch Security TechFund. Our network and premium partners pay an annual fee for this. We keep Premium Partners on our radar and facilitate them proactively.

Governance

"The municipality of The Hague helped set up and co-finance the project, along with industry and knowledge institutions. Initially, they were also on the board, but that has changed with our new governance. We now have regular progress meetings with them instead. A gateway review showed that we needed to have a clearer separation in our governance structure. We now have a small Supervisory Board and an Advisory Board that is much more broad-based. This way, HSD offers broader representation, because more people are involved, but at the same time maintaining clear separation.

Perseverance

"When you work with many people, it is vital to keep bureaucratic processes as minimal as possible. This enables you to keep agile. We are, of course, an innovation team. But what we have also noticed is that you need to put people together quickly, without first working out the programmes in detail and then confronting them with the results.

"And what I said previously: Checking if there's energy is important, but you also need true perseverance yourself. Innovation is not always an easy process, sometimes it is just hard work. If you believe in something, you have to go for it."

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Innovating together with the user in mind

Dirk-Jan de Bruijn Ministry of Infrastructure and Water Management

The Ministry of Infrastructure and Water Management is looking to address bottlenecks in the transport sector in the areas of traffic flow, safety, sustainability and the enormous need for transport. These problems can can only be resolved together with partners, says program director Dirk-Jan de Bruijn. The user must be front of mind for this.

"As a government, our aim is to be the connecting factor between partners, to solve issue. I'm a strong believer in innovating beyond boundaries. 90 percent of innovations result from collaboration between organizations and not within organisations.

"Through Modal Shift we want to move freight containers from roads to inland shipping on a large scale. This is more sustainable and increasingly necessary as the capacity of transport corridors will be reduced over the coming years. We work primarily with overarching branch organisations such as TLN, Evofenedex, the Port of Rotterdam, ministries, and waterways and road management organisations such as the Directorate-General for Public Works and Water Management and the provinces. We are proud to have these players on board and in agreement, and to have a common ambition and

established approach. This issue is so complex that it's impossible to resolve it on your own. For example, for the large-scale application of Modal Shift regular services have to be operationalised. Sailing according to a timetable, and not just once a week, but with regular twice daily services.

"In addition to stimulating and facilitating the supply side, we also have to consider the demand side. These

are mainly carriers and shippers. We have to convince large parties with huge transport needs such as Heineken, CCT, Kloosterboer and McCain – as well as many smaller parties - to transport their cargo via inland shipping instead of by road. The complexity comes from the

fact that we need to create partnerships which enable competitors to work together.

"90 percent of innovations result from collaborations between organizations and not within organisations."

Forcing breakthroughs

"We started by creating urgency: The replacement and renovation programme of the Directorate-General for Public Works and Water Management will significantly 'pinch' the capacity of transport corridors, together with climate challenges. With this in mind, we pulled suppliers together and said, 'This is the momentum we need; we are going to force this breakthrough now. If we really want to break patterns, we have to start working together now.' To support this, we looked closely at figures and definitions, to prevent unnecessary discussions about them. After this, we organised a 24-hour, co-creation session with the authorities and around fifty hauliers and shipping agents to see if they wanted to join. Getting people to put the social issue first and not their own institute or organisation was certainly no easy job. Despite resistance, you have to ensure that you achieve cooperation at all levels. The session was mainly attended by professionals who were in a position to achieve a breakthrough back at their own organisations.

"Through the programme, we want to stimulate all kinds of projects that demonstrate that it really can be done. Not just talking about possibilities but doing it and learning from it. Make some noise about what we've achieved and ensure that we create action. Don't nag and pester too much about governance, that's very distracting. The easier it is to explain, the better it works.

"Despite resistance, you have to ensure that you achieve cooperation at all levels."

Funding

"Public funds are available to make this possible. At the same time, the intention is that private parties invest 'in kind'. This fosters mutual commitment. There are substantial hurdles to be overcome and this means that these parties also have to make real investments. The resources we are investing in have a multiplier effect – achieving a permanent transition using a temporary stimulus. It is really about stimulation. Subsidies imply that you will permanently rely on a government drip.

"Of course, we want to avoid dealing with gold diggers who are only involved for their own benefit. At the same time, we also want to be able to make headway, so we have invested considerably in a three-way partnership between lenW, top sector Logistiek and the Logistics Alliance. Using a funnel approach, they decide together how funding should be used, aimed at maximum value creation. They consider whether a project helps us to overcome a barrier and what can we learn

from it. This helps avoid having too many similar projects. Then, in the funnel, you can see the stage a project is at and the commitment behind it.

Trust

"Ultimately it's all about trust: Are you working together towards the same higher goal? Is everyone still in it for a common purpose? For us, the goal is to move two thousand containers a day from road to inland waterways. You can argue about the route to get there, but there is no point in doing business with people who don't agree on the end goal.

"An important requirement for our projects is that the tools or output are also made available to the community if they have been financed through collective means. This also helps the community to be clear about what is collective and what is individual. In my opinion, self-interest is the best driver for collaboration, but with consideration to shared interests. Of course, you participate because you want to benefit yourself, but you must also contribute to the common good.

Value creation through application

"What we very often lose sight of with innovation is the application. Technology is fun, of course, but the focus should more often be on the value you can create with it together. This should be the first priority. You need a value case, a kind of business case at ecosystem level in which you make clear what the advantages of working together are. By holding talks with parties, an initial *coalition of the willing* emerges.

"I think we underestimate the importance of the connecting role of the government in bringing parties together and working together on a vision. Especially in a fragmented landscape with a multitude of different parties. People sometimes think and talk about each other with a great deal of disdain - government versus business - but you simply can't do it without each other. Innovation involves breaking patterns together."



IT education: Innovate with real-world issues

Sanne Borger
Workshop for Digital Professionalism

"At the Noorderpoort MBO institute, our aim is to innovate IT education and help meet the demands of professional practice more closely. We therefore work together with the business community to enable students to work on a real assignment based on a partner's issue," says community manager Sanne Borger.

"At Noorderpoort we use a Workshop for Digital Professionalism, together with companies, to innovate IT education. Students work together with a teacher and a company on a practical assignment based on an issue from the business world. This offers opportunities to innovate the curriculum. Together with the teachers, we discuss which subjects are still missing in our curriculum. We then test this with our business partners to see if these are indeed the relevant topics.

"For example, we had wanted to look at hosting for some time, but had not yet had a hosting party join the workshop. We looked for one as a partner and were therefore able to give the subject a place in our practicum. For the topic, ethical hacking, we worked together with a market player which enabled the teacher to create four new modules for his own classes. It's the ideal way to develop new educational materials. Both the teachers and the students gain new knowledge.

"Our main goal is to professionalise the teachers, that's the payoff. Everyone does it in their own way, some are more process-oriented, for others the curriculum changes. We also organise master classes and events for students, colleagues and our partner companies. In addition, we supervise students who are just starting out in business by linking them with entrepreneurs from the region and allowing them to make use of our facilities.

Public-private partnership

"The workshop is a public-private partnership with a term of four years. We are not a separate private company or a foundation or anything like that, we are a project within Project within Noorderpoort. Our budget is sourced equally from three areas. One third is made up of the hours contributed by companies. In addition, the school contributes many hours and we receive contributions from Noorderpoort, the province, municipality and business associations. This is also one third of our income. The rest comes from the Ministry of Education, Culture

and Science (OCW), which wants to encourage education innovation together with companies. We provide progress reports on this; on how companies contribute to the project in terms of hours and on how the added value of this approach contributes to society, students, partner companies and the government. Based on this we receive a subsidy from the OCW's regional investment fund.

"IT companies mainly target higher vocational education (HBO) and university graduates. It is our aim to show what secondary Vocational Education and Training (MBO) graduates are capable of. Because companies work together with our students on assignments, I hope they will start to think, 'Hey, what if I start organising my work in a different way?' Especially given the shortage on the labour market. It is possible to organise jobs in a way that the work can be done by an MBO student. This is why I also discuss with partner companies what they think of the level of our students. This helps to discover whether certain things could be better integrated into the training.

"Companies are eligible to become a partner when they commit to contributing between 80 and 240 hours to the workshop

annually. This is outlined in a collaboration agreement, in which we also state what kind of equipment can be used in the workshop and the value in euros.

"You can't always expect companies to provide hours free-of-charge."

"It would sometimes be helpful if we were able to make a contribution to partner companies, even if just at cost price, as we require real content expertise from companies and it requires a significant investment for a company to contribute so many hours. It should also be clear in the market that you cannot always expect companies to provide these hours free of charge.

Subsidy providers should also realise this. And never do a project for the sake of it, but do things that really live on. This is the added value of working with real assignments instead of

class assignments. It puts students in touch with real world issues.

Intellectual Property

"At one point, a company was interested in a project involving a video platform created by a couple of students. We said to the students that we understood they were very flattered right now, but to think about it very carefully and look at their options. Did they want to show everything upfront or not? We have not yet fully

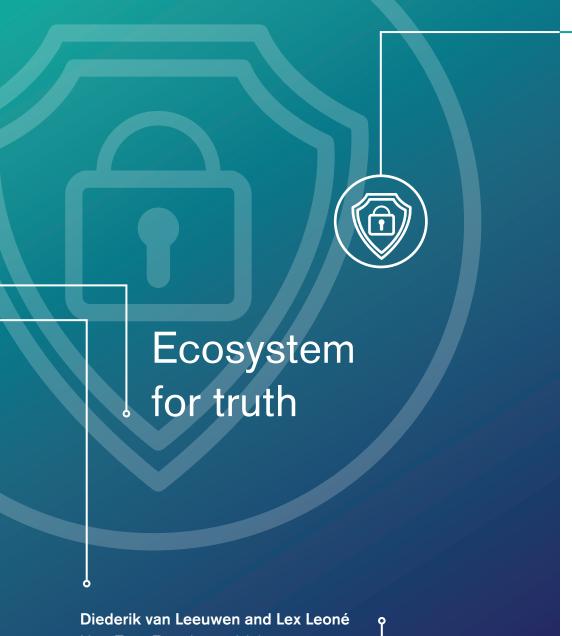
clarified our policy on intellectual property, so we have added a law firm as a workshop partner, to share knowledge about intellectual property rights with the students. I expect this to be resolved shortly.

"We also have connections with other educational institutions in the region. Our workshop is vocational level, the Hanze University of Applied Sciences offers the Digital Society Hub and the University of Groningen has the Groningen Digital Business Center. We look out for opportunities to work together. For example, we are running a project relating to filters for hydrogen buses which students from the Hanze University of Applied Sciences are also involved with. In another example, our students are working on an assignment for the municipality about data-driven enforcement, which examines what you should enforce and when. The University of Groningen will join later for the data analysis.

Flexible control

"Our steering committee is a representation of the work we are doing and includes someone from the Executive Board, a director of an IT study programme, as well as a number of partner companies, someone from the Hanze University of Applied Sciences and an independent person. We are flexible in this respect; if a partner is unable to put in enough time, we replace him/her with another partner.

"Since the workshop commenced around a year ago, two students have accepted part-time jobs at one of our partner companies. Internships have also been arranged. For example, a student who tested equipment for home care together with intermediate vocational nursing students, discovered an error in a pill dispensing machine. This was then reported back to the manufacturer and the student received compensation and a work placement. They were really impressed! This is another clear example of our focus on real-life issues in the workshop."



New Trust Foundation / Administrative Organization (UBR) Ministry of the Interior and Kingdom Relations of Netherlands Through the New Trust Foundation, Diederik van Leeuwen and Lex Leoné are creating a platform together with colleagues, industry and science institutions, to work safely with data and digital technology - both within the Government as well as between the government, science institutions and industry. Data increasingly plays a leading role in our society. How do you ensure that that data can be trusted - and at the same time prevent the need to endlessly double-check information? According to the New Trust Foundation collaboration is the key to success - by not entrusting the verification of data to a single party, but to a network in which multiple organisations provide attributes that can validate its trustworthiness. Van Leeuwen and Leoné talk about their experiences.

"The digitisation of society brings a lot of benefits, but also risks. A proof of registration, certificate or quality mark, are no longer enough. Devices and even work processes need their own un-crackable identity. Consider, for example, a situation in which a heart-lung machine is hacked, or an insulin pump - if you were to give a few too many drops of insulin every day, then you could potentially kill someone remotely. A gruesome example, but it does illustrate the importance of the issues we face at the New Trust Foundation.

"The idea for the platform originated with Brexit. When we were invited to a networking meeting nearly three years ago by a member of the British parliament, they were not only interested in a possible British version of I-interim Rijk, a tool which helps help colleagues realise their I-ambitions, but Brexit was coming, of course and the government had already developed a far-reaching vision for the application of distributed digital ecosystems. Due to Brexit, they needed a new form of authentication for dealing with the EU; a simple to implement form of authenticating transactions. In England, they saw that data that had already been checked once by an authority was being checked again by others at an enormous expense, of approximately £1 billion per year. This starts you thinking and requires - apart from Brexit - a different approach.

"This sparked our interest and we started informally as a broad-based working group with representatives from various departments, industry and universities.

This was done independently of the English initiative, but with the conviction that, in addition to cooperation with reliable partners outside the Government, an international approach was also required. We have now set up the New Trust Foundation which formalised this approach. It is a private foundation in which both civil servants and - at

"From the outset we were convinced that this – together with collaborating with partners outside of the Government – required an international approach."

present - one entrepreneur have seats on the board. This is done in a personal capacity as it is not a government foundation, which enables it to act on an equal footing with market players. Despite there being no formal relationship, the government can of course set appropriate conditions within such a network, and this also applies to the civil servants who co-manage the foundation. At UBR, we have set this up within the applicable frameworks."

Connected 24/7

"If you look at the direction we're heading, it is a dynamic world that is digitally connected 24/7. In such a world, you need attribute-based authentication. In a digital society, trust is needed. When you see a device, technology or digital person, you need to know who or what you are dealing with. Methods for achieving this, such as a digital signatures, are already available but in a dynamic and increasingly complex digital society, verification and access possibilities will have to develop at the same pace. In addition, the fact that an authentication method is legally accepted, such as DigiD, eIDAS or E-recognition, doesn't always mean that it is reliable enough. Fraud is a common occurrence and is a growing and increasingly sophisticated problem. We are working hard to improve this through innovation, and this includes innovative ways of working together.

Single point of failure

"What you want to avoid in the first place is a single point of failure, where all information about a 'truth' - such as an identity - is concentrated in one place. This is a broad social problem for both business and government. Instead, you want to create a network that connects attributes at different points, from governments as well as NGOs, scientific institutions and eventually - under certain conditions - private companies. Based on these various checkpoints, it's possible to confirm that you're dealing with the right person, who has the rights or qualifications to be allowed to carry out a certain action or transaction. The government has long ceased to be the only party to issue identities. Banks,

telecom and energy companies, as well as parties like Google, Microsoft and Facebook also do this. But how do you know whether an identity is correct? And what is stored and is it used for other things?

This is why you use attributes. These can be anything - the fact that you travelled with your public transport card, messages received and sent with your phone at the location in question, a movement to show that you are human, and so on. If you are able to link all these attributes together, you won't even have to prove that a bank card is yours if you want to pay something, because that data is not only provided by one company, but is also confirmed by four, five and at some point dozens of other suppliers via their attributes. This creates a kind of self-cleansing effect for less reliable, outdated or sometimes even corrupt data. It becomes a verifiable symbiosis of *people, process, technology* and attributes.

Bananas from Brazil

"Take the example of a freight container of bananas arriving from Brazil. You could fit it with sensors to show that it has not been warmer than 7 degrees during the entire journey, which means you can also deduce that the door hasn't been opened and the bananas have not rotted due to a change in temperature. It also provides assurance that no banned substances have been smuggled into the container during the journey. This can be fully monitored. You can read the data in Rotterdam. Or if you can't, don't or don't want to share the data, an advanced system – which can determine the right level of authentication using *zero knowledge proof* - will give you a green flag in your system. This mean that the container doesn't have to be rechecked.

"Not only do you then make a huge leap in efficiency, but this is also simply the direction were heading with the large quantities of data generated by The Internet of Things. The problem is that little knowledge is shared on this subject and there is still no ecosystem that allows us to build trust in these kinds of transactions and keep them interoperable. Not even internationally. And that is what we are working on right now.

Public-Private Partnership (PPP) construction

"The story is starting to gain tractions, in terms of concept and paradigm, but we still have to build it together. A PPP construction can contribute significantly to this. For example, by creating a sandbox with several parties which will enable you to experiment with knowledge partners without invoicing each other directly or

other complicated constructions. Right now, we are being left behind in many areas by malicious parties - so we need speed of action and knowledge. Furthermore, you don't want to do this just within the government, you also need to involve the business community, otherwise you risk missing the first mover advantage. I have to say, though, that you should start with foundations, NGOs, and scientific institutions. The *corporates* of our world don't inspire the most confidence in the first place, but they can certainly contribute. Guiding companies in how they handle attributes could also be regarded as a task for the Government, for example by passing them through well-known checklists. Subsequently, you can leave it to the market to determine how they then use and combine these reliable attributes and start cooperating with others. What they develop and deliver is then up to them.

"With the New Trust Foundation, we aim to achieve two things. Firstly, to get this knowledge network out into the world to support a paradigm shift in thinking about new forms of trust. Secondly, as a kind of branch organisation, we want to identify which trustworthy organisations exist and determine what attributes they can provide. We want to start the wheels turning, because the foundation itself, of course, should not become a register - or in trust terms, a single point of failure.

"The need for this type of construction and proof that it works was recently put to the test when everyone was forced to start working from home

en masse due to the COVID-19 outbreak. This was quickly followed by the call for an independent and highly reliable platform for video conferences. In just a few weeks we had a developed solution, managed in the Netherlands, which applied *privacy by design*. UBR was the client, in consultation

design. UBR was the client, in consultation with other government organisations, and together with a general contractor and other companies, we achieved this in a short space of time and at a relatively low cost. Because of the need to tackle this together, companies were prepared to carry out this assignment on favourable terms, with a number of unbilled extras. The advantages of a PPPs were clearly evident in practice.

"Create a sandbox which allows knowledge partners to experiment without invoicing each other directly or other complicated constructions."

"The solution is now available as a *minimal viable* product for the Government and third parties. This is a

perfect example of the impact the New Trust Foundation can have. Now that we have achieved this, we will continue to set up expert groups and other service concepts. Sharing knowledge is useful, but 'demonstrating it' is still the most powerful approach."





A question of give and take:
Startups and the Government

Arinda van der MeerStart-up in Residence Municipality of The Hague

Start-up in Residence brings startups and the Government together by enabling them to work together on important social challenges. The Municipality of The Hague offers opportunities to young entrepreneurs - and provides, when required an attractive business climate in the city for the growth of innovative, young companies. Arinda van der Meer explains how she connects flexible startups with a more rigid, rooted government.

"At Start-up in Residence we organise challenges where startups present ideas around a certain theme. These are then assessed using a specific evaluation system, including things like the level of innovation, social and economic value and scalability. We then invite three startups to pitch their ideas.

"Following the pitches, the startups send in a definitive proposal with a specification of the prototype and the amount required. Based on this a winner is selected. A further session follows to determine the size of the solution and a joint decision is made about what will be delivered and when. We specify this very clearly, with a monthly milestone and a small pay-out. Ultimately we want to see a viable prototype. That is truly an in-residence period. We then look at whether there is potential for a follow-up, at which point co-creation is our priority.

Contracts

"The first phase, when money for a prototype is provided, the first contract is agreed. This applies only to the duration of the development of the prototype. This may then be followed by a second contract for the project. If a municipality comes up with a challenge that they want us to tackle I present this to the management team and ask for their agreement to reserve a minimum of EUR 20,000 for the prototyping phase, and whether there is money available for a follow-up phase. I also ask the challenge owners whether they have included their leadership in the decision. Civil Servants formulate the challenges. I then share an agreement with them outlining that they are participating in Start-up in Residence, what their role is, how much time they will spend on it and that they have a certain amount reserved in their annual budget. It's an effective way to create a clear commitment.

"For each challenge there is a separate tender. Prior to this we had a European tender. We have tested several forms of tendering, and fortunately there is some room for manoeuvre in procurement law. However, now that the programme is becoming increasingly serious and large-scale, the scope for being creative in the area of procurement law has somewhat diminished.

"Later in the process, it is wise for the startup to look for other customers, as you don't want to make them too dependent on the municipality."

Fortunately, as a municipality we can put out multiple private tenders for up to approximately €214,000. If your primary goal is to experiment, this amount can get you quite a long way. Later in the process, it is also wise for the startup to look for other customers, as you don't want to make them too dependent on the municipality.

"And, of course, the Ministry of the Interior has started innovation partnerships, which we have now also worked with for the first time. On the downside, you become part of a European tendering process and that is much slower, with multiple tendering it's easier to maintain momentum.

Co-creation

"In the collaboration, we initially formulate the problem and then encourage a co-creation process between the startup and the municipality of The Hague. Together with the startup, we then investigate whether the problem needs to be refined further during the process. They often also ask questions that

make a civil servant think: 'Gosh, we should take another look at that'. The relationship between the civil servant and the startup is actually what it's all about. The party that guides us during the, 'in-residence period' has developed a kind of Collaboration Canvas, which is an effective way of openly exploring both perspectives of the problem.

"The relationship between the civil servant and the startup is actually what it's all

"It is a dream of mine to be able to 'lock' the civil servant and the startup in a room together for three months during the process so that they can truly co-create, build prototypes - go through the entire process together. That's what I'm aiming for, but it's simply not feasible right now as most civil servants don't have the time. In practice, the startup usually does most of the work. This is a good thing, because they get paid for it, but it would be nice if the Government became a

more integral part of the process and that it did not lean too much towards commissioning. You would like to remove the hierarchy.

Speaking the same language

"We're focussed on ensuring that the civil servant and the startup get to know each other well and that they speak the same language. This year we therefore want to pay more attention to what exactly a startup is, how they move, how they work. From the startup's perspective, they get more insight into how a government works, how decision-making processes work and how they deal with budgets. People often think that a government has a lot of money, but they don't realise that it has been budgeted for years. Both worlds need to understand each other better.

"To continue this feeling of togetherness, we are building an ecosystem that startups can make use of, using a system of credits to access mentors, help with the business models or a finance strategy etc. They can hire experts for around ten hours and in addition follow a compulsory course. This is mainly aimed at early-stage start-ups looking for more guidance.

Intellectual Property

"If a collaboration leads to a fruitful outcome, the intellectual property remains with the startup. This is outlined in a contract, of course, but in principle the startup is free to sell it on, for example to other municipalities. This is precisely what motivates us. I can imagine that a municipality is looking for exclusivity if they really put a lot of money into something, but it hasn't come to that yet. If this were the case, we would prefer to encourage municipalities to cooperate.

The next step

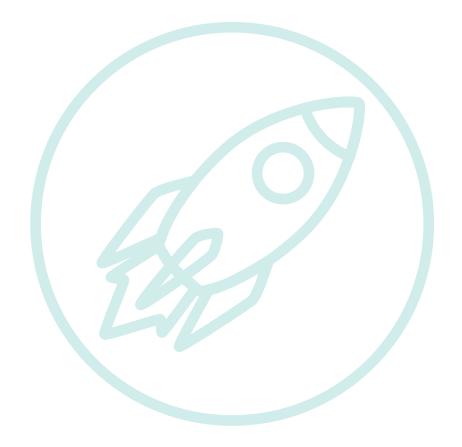
"I would like to see us take this further. Right now, the focus is on experimenting. The startups we bring in often don't yet have a product or at most a Minimum Viable Product. If you then want to work with the Government, you need a lot of time before you're able to bring a scalable product to market. We currently have a startup that deals with waste and after four years it finally has a solid business case. In this case, for example, there were certain IT systems that didn't work with their product and so at some point someone had to take the plunge internally and build something completely new. That takes time, because then you need to start another tendering procedure.

about."

Chance of success

"It is also our responsibility to professionally guide a startup when they arrive, and it is very important that something comes out of it. But I always state clearly that there is a possibility that nothing will come of it. With a solid evaluation you can, however, often still get something valuable out of it.

"At the end of the day, you also shouldn't underestimate how much influence the internal organisation has on the whole thing. Startups have to work hard and have a good idea, but the internal organisation also has to be ready for it. You need high-level commitment; people's time needs to be freed up. Often, there is also competition between departments, because you are working on the same topic, so you need to know precisely what type of innovations you want to bring in. And finally, remain flexible. You need to keep adapting based on the feedback you receive, just like startups do. As a government, you shouldn't be too rigid about this. It is never finished."



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Experiment with partners in a physical testing ground

Marjan Kreijns

The Green Village

A physical place where parties can build, research, test and demonstrate sustainable innovations for urban environments. This is made possible by The Green Village testing ground located on the Delft University of Technology campus. Industry, scientific institutions, governments, and the public work together in a 'living lab' to remove bottlenecks. Director Marjan Kreijns explains how this secure intermediate step helps make further progress.

"The Green Village is a physical testing ground. It covers an area the size of several football fields and what makes it so special, among other things, is it's rule-free status. Its building classification code was issued by the municipality of Delft using the Crisis and Recovery Act. This means that, as long as it's safe, we can use the area to experiment with things that are not yet available in the real world, while at the same time emulating the real world a little. Of course, we have to abide by environmental and safety rules, but for innovative things, we have free scope.

"It is a *village* by name and by nature, with real inhabitants. Since June 2019, there are three typical 1970s terraced houses with different energy labels in the village, complete with inhabitants. And there's a reason for that. The Dutch housing market is currently facing its greatest challenge ever: How to make existing buildings affordable? When a housing corporation came with the request to place these houses, have people live in them and test sustainable innovations, we said yes straight away. It couldn't have been more relevant or appropriate for our 'sustainable neighbourhood' program.

"We can experiment in the village with things that aren't yet allowed in the 'real world!" "The up-scaling puzzle has four essential pieces: technology, business model, laws and regulations and the general public."

"This allows us to investigate which technology is suitable, but more importantly, what do the residents think of it? This is why the homes are occupied by tenants who would typically live in this type of house and not people who already have a passion for sustainability. This is exactly what we didn't want. These people are an integral part of the innovation process. In addition to their rental contract, they have also signed a 'Guinea pig' contract. This stipulates that new things will be added to their house on an ongoing basis and we'll be asking what they think of it.

Appropriate partnerships

"We always check whether a stakeholder who wants to use The Village for testing, is a good fit with our goals and programmes. We belong to Delft University of Technology, so it must relate to the big challenges of the future and sustainability. So, we don't say, 'You have a nice innovative house, you can put it here,' instead, we start the conversation with, 'What do you want to test? Why do you want to test it here? What are you looking to discover? What questions do you still have and what parties do you need to solve this issue?' If it's purely a demonstration, they can do it in their own car park. If they come to us, they also need to be interested in our ecosystem.

"During the intake, we check whether the concept fits within one of our four themes: sustainable neighbourhood, *smart multi-commodity grid*, future mobility and energy, or climate-adaptive cities. We then look at four aspects: technology, business model, legislation, and the general public. These four pieces of the puzzle are essential. If one of them is missing, it won't be possible to scale-up the innovation. We check what technical questions they still have; whether it can be turned into a sustainable business in the long term; can what they're looking to achieve be captured by regulations? The Green Village is a non-regulated area, so we need to confirm if an idea can also be applied in the real world. And what do the general public or residents think, and under what conditions would they embrace the innovation? If the answers to these questions are interesting enough, we will look further. What do they need? What kind of infrastructure? Where do we have space?

A safe intermediate step

"We work with the hopscotch principle. It starts with a small idea in a lab or behind a computer and eventually the aim is to roll it out on a large scale. You often do that in a pilot in the public domain. But in our experience, upscaling is much easier if you are first able to test it in a safe environment. Here you can try, fail, go back to the drawing board and move on again. We provide that safe intermediate step, which ultimately gets you much further than jumping straight to the pilot phase.

"The Green Village has a complete infrastructure: heat network, hydrogen network, direct current-electricity and a digital platform to store and view data. Everything you need to test innovations. You can just hook up to it, without having to invest heavily. But that doesn't mean you'll be able to do the same in the real world. We prepare people for this. You therefore shouldn't stay with us for too long. It's a temporary step and then you need to start piloting in the real world. And only then are you ready for a large-scale roll-out.

"The next step is to draw up a cooperation agreement, which outlines tasks and expectation, such as who is responsible for what; how is insurance arranged? It also stipulates that you must remove your construction once finished, so that someone else can make use of the space. If we really are going to develop something new together, we will of course put an agreement about intellectual property in place. But in general, this remains with the parties who use our facilities for testing.

Tailored financing

"We also discuss financing with the stakeholder. For large companies, financing is not a problem because they have a large budget. For small parties and startups however, financing is sometimes a challenge, which is why we help them put together grant applications that include some of that financing. In addition, we ask for tailored contributions from small, innovative entrepreneurs who have the initial idea. In addition to this income, we receive a contribution from the university and are allowed to use the site free of charge, as well as a lot of the facilities around it. The province of South Holland also contributes.

"We are increasingly offering ourselves project partners. At the moment there is, for example, a very large tender from Topsector Energy. These are often led by larger parties, such as universities, the Netherlands Organisation for Applied Scientific Research, or a large company. We are a small partner that can help facilitate the experiment. This is also the set up with the Dutch Research Council (NOW) and Horizon 2020 projects.

Legal structure

"The Green Village is a foundation. This allows us to distance ourselves from the university and switch more quickly. Our projects have a variety of different stakeholders, but this is driven by the foundation's board, almost all made up of Technical University students. In addition, we have a green deal, a kind of advisory board that focuses on content. It is made up of major stakeholders: the municipality of Delft, the province of South Holland, the ministries of Infrastructure and the Environment, Home Affairs and Economic Affairs and Climate, Stedin, Alliander, Engie, NEN, TU Delft, and the Delft regional Water Board. These are important partners who have experience with innovations at an early stage and are therefore well positioned to help to solve bottlenecks. These are parties that are curious about what we're working on and can ensure that the laws and regulations are ultimately make it possible. Take for example, circular concrete. There is currently no standard for this, so it is not applied in the real world. Right now, we're trying to get this on the agenda.

"We involve all parties from the start - from scientist to end consumer. This gives them the opportunity to share their thoughts and opinions, they become co-owners of the experiment, and they help to solve bottlenecks along the way. This enables many more sustainable innovations to be scaled-up."

"From scientist to the end consumer, it's essential that everyone joins the journey from the beginning."





Rutger van Zuidam, Odyssey Wouter Welling, Ministry of the Interior and Kingdom Relations Odyssey offers governments, businesses and non-profits a neutral space, and support with processes, to find solutions to common problems. We find out more in a double interview with founder, Rutger van Zuidam and Wouter Welling, who participates in Odyssey on behalf of the Ministry of the Interior and Kingdom Relations.

"We see a many parties trying to find their way," says Van Zuidam. 'How are we going to address the issues that affect us, when we are not the only owners, and in situations where we don't necessarily need to own the solution?' It is really about issues that an organisation can't solve by itself or through an off-the-shelf solution. Issues where the solution needs to include everyone, as many stakeholders as possible who are relevant to the complex system around an issue.

"Of course, parties involved in a collaboration also have their own interests, but neutral territory also exists, and this is where common interests meet. You could say that it is another form of the Dutch polder model, not to reach consensus or divide the pie, but to to come up with and discover something new by building it together.

"On the Government side, we often don't have enough knowledge of the possibilities and how we could develop it further," adds Welling. "We often think too much along a single track, which is why we were looking for a way to examine different technological possibilities using open dialogue without immediately entering a formal relationship. This resulted in the open innovation programme, where you lay an issue on the table and different parties then work on a concept in both competition and collaboration, with the input of experts from the government, private and academic sectors. This then becomes open innovation, instead of restricting it with responsibilities beforehand.

"It's about working with an ecosystem of thinkers, doers and advisers to solve a technological issue, without the path dependency that dictated by a tender.

Value in social relevance

opportunities it offers, but also the threats," says Van Zuidam. "It leads people to consider how they can use technology for things that help society and society at large. The commercial parties who work with us on these challenges also look at socially relevant issues. For them, there is value in this; it enables these companies to become part of a future that is relevant to society.

"Odyssey is a collaboration of all kinds of parties, public and private. This season, we have collected 21 challenges split into 14 tracks. The organisations working on a challenge are organised horizontally and vertically. There are organisations that come together per challenge to work within the ecosystem of that issue. And there are parties that say they can add value across all challenges, such as suppliers of technology or knowledge institutions such as universities. Regulators are also involved in several challenges.

"Odyssey is a facility for discovering the future, by building it through collaborations. This also means that you need accept in advance that the outcome might not be the one you predicted in advance. If you already have a clear idea of the building you want to create, then Odyssey probably isn't the best option.

Flexible outcomes

"Challenges and ecosystems work with the facilities offered by Odyssey in different ways. It's totally dependent on what the parties themselves make of it. You embark on a journey together, according to certain agreements. This offers much more flexibility regarding the outcomes of the journey. At the same time, you agree to do everything together to make the outcomes as positive as possible.

Welling explains how this is regulated by the government. "It is quite difficult to set up a challenge using the methods available to the Government. You are restricted to a tender, contractor, subsidy or contribution. But what Odyssey does, goes beyond delivering a pre-specified product to the Government. That's why we now provide a subsidy and

"Many people are inspired by new technology and see the possibilities and

include a letter about how the subsidy works. You also need to make solid agreements about what you expect from each other. Working out how the Government can be an active participant on as equal a basis as possible, is still a puzzle.

Partnership contract

"We offer different forms of partnerships to provide clarity on the position a participant has in an ecosystem," says Van Zuidam. "A partnership contract outlines a participant's role and also what we can offer the participant in order for the programme to succeed. Odyssey is a company that focuses on impact maximisation. Social importance comes first, but not at the expense of the business, and with the interests of the partners also represented."

Welling emphasises: "If the government organises something itself, there is always a hint of political interests or a client-contractor relationship. It therefore helps to have an organisation that is tasked with focussing on the content. Odyssey fulfils this role in the ecosystem; keeping everything as pure and content driven as possible and enabling quality to emerge. As a government, this is difficult to achieve, as certain power structures are always present.

"We are in fact a neutral space," adds Van Zuidam. "Stakeholders can co-create here on an equal footing."

Intellectual property

"Intellectual property being owned by a supplier or Odyssey does not have a positive influence on a long-term collaboration," says Welling. "As a government, it's not possible to free up capacity to improve an idea if the idea belongs to someone else. It is justifiable that people get paid for the hours they put into something, but the idea should not be a form of ownership. The idea is developed together in an ecosystem. I believe that you have to work as openly as possible, otherwise you attract distrust.

"All issues and solutions at Odyssey are published with Digital Commons and are therefore open-source," Van Zuidam emphasises. "Odyssey has no rights to any intellectual property developed and has created a safe environment for both the teams and the challenge stakeholders to jointly own the intellectual rights."

"Working out how the Government can be an active participant on as equal a basis as possible, is still a puzzle."

Joint involvement

"Civil servants should be much more open to the outside world and dare to enter unexpected ecosystems," says Welling. "At Odyssey there are people walking around who you would normally never come into contact with as a civil servant. They have expectations of what I'm like and vice versa, but if you seek out those unexpected encounters, I'm confident you bring much more value back to your organisation than if you only talk to the same people. If you dare to look for those unexpected encounters, you're much more likely to discover exciting solutions to a problem than if you simply work with people like yourself.

Van Zuidam concludes: "We are unravelling a 21st century version of the polder model. When you have a problem, don't just look at who can solve it, but who can be jointly involved in the solution. The other party is crucial for solving your part of the problem. In short: the more stakeholders involved in building a solution, the more people can benefit from it."

"I believe that you should work as openly as possible, otherwise you attract distrust."





Getting the most out of blockchain together

Peter Verkoulen and Sandra van Heukelom Dutch Blockchain Coalition The Dutch Blockchain Coalition (DBC) is a partnership between the Government, knowledge institutions and the business community. The DBC's aim is to promote reliable and socially responsible blockchain applications and create the best possible conditions for these applications to be developed. The DBC works as a catalyst by connecting and activating a public-private network - with all the challenges that this entails. Peter Verkoulen and Sandra van Heukelom talk about collaboration in a broad, diverse coalition.

"The DBC started three years ago as a collaboration between the Government, knowledge institutions and the business community. For a few months now, we have also included small parties such as startups and SMEs in the coalition. The big question for the coalition is: 'How can we bring blockchain to society?' We are looking primarily at Blockchain for Good - how can blockchain help solve challenges facing society? We do this by working on a number of Use Cases that have a large societal impact, for example, the simplification of pension administration or making logistics chains more transparent. We also document the framework conditions for the implementation of blockchain. For this we have organised several working groups, including a legal one. In addition, through our Human Capital Agenda we work to ensure that we distribute available blockchain knowledge as quickly and efficiently as possible. Finally, we are developing a framework for Self Sovereign Identity, as we believe that a reliable, digital identity will be the motor behind a secure digital economy.

A role for everyone

"The Ministries of the Interior and Kingdom Relations, and Economic Affairs, together with knowledge institutes, have been working on a joint project for the first time. the Netherlands Organisation for Applied Scientific Research (TNO) plus several other institutions and initiators of the coalition. For the government it is the companies initiated the coalition. For the Government it's a way to keep abreast of developments in the private sector. And for private-sector parties, it is attractive to be part of a collaboration in which the government is also represented, as this provides a better insight into the

attitude and direction of the government. Knowledge institutions are welcome, as there is still a large amount of research to be done. For these parties, it is also interesting to see what happens in practice in their respective areas of research. In addition to the three parties, i.e. government, businesses and knowledge institutes, the ECP (Platform for the Information Society) also plays a role, both as a supporter and a connector.

"A 'light' approach has been chosen for the approach to collaboration - from a legal perspective - no complicated legal structure, but a participation agreement and a set of house rules and regulations that regulate the relationship between the parties. For the time being, we see no reason to deviate from this structure, although we will of course regularly monitor whether the current structure still suits the ambitions of the coalition. But for the time being, it works fine!

House rules

"We are currently arranged in a way that everyone commits to the house rules, which, among other things, outline our governance. We have a core team (a kind of supervisory board), a coalition council that is authorised to decide on budgets and programmes and a steering committee that monitors implementation. In addition, there is an advisory board of people who have the final say in large public or private parties. The programme office, which is also supported by the ECP, supports the coalition administratively and in terms of communication. For instance, the ECP shapes DBC's communications.

Finally, the coalition manager has responsibility for the day-to-day management and constantly connects all components with each other.

"One of the strengths of the coalition is that we are able to separate voluntariness from non-commitment."

Splitting the bill

"So far, parties who become a member, enter into an affiliation agreement with the ECP which covers payments and in-kind contributions. Financially, it is organised in such a way that the large parties make a financial contribution and commit to also making in-kind contributions. Knowledge institutions only make an in-kind contribution. That is fine by us, as these are very active contributions. You want people to be actively involved and not just watching from the side-line.

"We expect a minimum contribution of 0.6 Full Time Employees from major parties. We haven't enforced this yet, but it's clear that the people who are fully committed get more in return. This makes newcomers eager to invest a lot of time in working groups, because they see that you can get something out of it - in terms of material knowledge, a network and perhaps also commercial opportunities. Until now, we have not chosen to enforce the contract, but of course we continue to monitor membership to ensure it doesn't become too informal. We are succeeding well in this. One of the strengths of the coalition is that we can separate voluntariness from non-commitment.

The ministries of the Interior and Kingdom Relations and of Economic Affairs provide specific subsidies, with which the coalition must achieve specific objectives of importance to each of the ministries. For example, the Ministry of Economic Affairs recently provided a subsidy to study tokenisation and to put the Netherlands on the map in this area.

The evolution of a coalition

"We also constantly review how we can broaden the coalition. Ideally, a party should normally become a member, but if that doesn't work out, it is still useful to invest in building good relationships. For instance, we saw an increasing need to broaden the coalition with startups and Small and Medium Sized Enterprises (SMEs), and have therefore recently introduced a low-threshold membership for startups and SMEs.

"It is also important that the scope of the coalition remains attractive and clear. This is always a challenge with innovation coalitions; the final objective isn't fixed in advance and if it is, it often changes. In these situations, it is important to have close cohesion and mutual trust at the start of the innovation process, because otherwise you will waste energy discussing a point on the horizon, which we are not yet in a position to set. This also means that a lot of time needs to be invested in the early years of such an innovation coalition, and that there needs to be a solid governance structure in place that clearly supports the innovation process. By allowing the coalition council

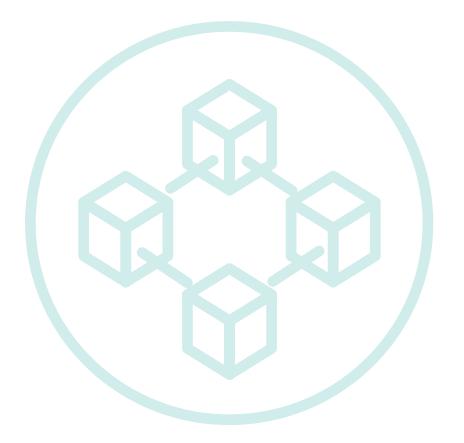
"By allowing members to make the important decisions you create a sort of direct democracy, in which everyone has a voice.

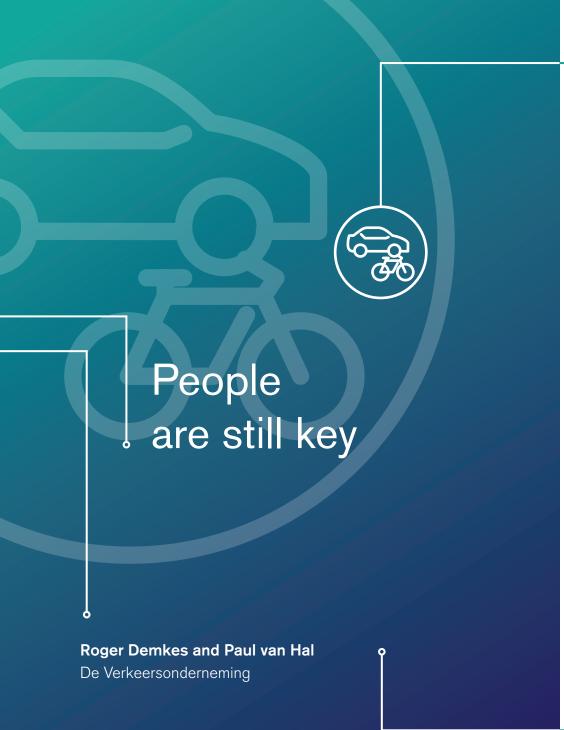
- and thus the members - to make the important decisions, for example, we create a kind of direct democracy, in which everyone has a voice. Solidarity, trust and openness will thus - hopefully - become part of the culture.

"As soon as it is possible, we put more concrete agreements in place, for example, concerning intellectual property. Parties then know where they stand as soon as a goal is in sight. If you don't arrange this in good time, you run the risk of a discussion arising when the end product has already been achieved.

Know why you want to join

"For individual members, it's important to have a clear idea of your motives for membership: "Why do I want this, why am I in this?". A clear answer to this question prevents disappointments and frustrations, and ensures that the people involved can properly articulate the added value of membership internally - i.e. within their company, knowledge institution or department/ organisation. For the coalition, it is important that parties have the drive to want to improve society or to let their employees do something different for a few hours a week, to stimulate, inspire and broaden their view. Finally, it's all about the community feeling; that you are happy to work on something and have the feeling that we are going somewhere together."





With De Verkeersonderneming (The Traffic Company), Roger Demkes and Paul van Hal resolve accessibility issues. They provide innovative solutions to ensure that people reach their destination on time, preferably in good spirits, every day. They do this in collaboration with the Municipality of Rotterdam, the Metropolitan Region of Rotterdam The Hague, the Ministry of Infrastructure and Water Management, the Directorate-General for Public Works and Water Management and the Port of Rotterdam Authority – as well as a lot of (private) partners. Together they talk about the challenges they face in their public-private innovation projects.

"Twelve years ago, the A15 motorway had to be overhauled. This would create a major access issue for the port, but a solid coalition between three government parties and the Port Authority was created. Together they founded De Verkeersonderneming. The idea was to create an organization that would transcend government parties, and which would provide space to think outside of the box.

"Today, in a nutshell, we deal with mobility and traffic management. We are there to see if we can influence people to think differently about their travel behaviour. Many people guickly jump to the conclusion that we're anti-car. But this isn't the case. We are anti-traffic. We try to look at accessibility issues from a socialpsychological perspective. With this approach you ask yourself why someone chooses to travel like they do, and what we can do to change that? With this in mind, we are really looking for a structural behavioural change that helps change the way people think about transportation. There's no point in asking us to build a bicycle path, that is a task for our parent organizations. We think more from a design perspective, and thus complement the road authorities traffic engineering perspectives.

"The idea was to create an organization that would transcend government parties, and which would provide space to think outside of the box."

Private company or foundation?

"Ultimately, it doesn't really matter which legal form you choose, it's about the desire to achieve something together. In our case, the Directors said something along the lines of, 'We have confidence in each other, we will make sure a pot of money is available and then we'll get it done.' Of course, we see a lot of public-private partnerships, each with their own form. It is not about the form, but about what the parties involved want to achieve together. If you say that you are going to do it together, you can often work things out along the way.

"The name 'The Traffic Company' (De Verkeersonderneming) was actually thought up by the Port Authority who wanted to work with a private company. But at the same time, our other three 'parents' are public - the Metropolitan Region of Rotterdam The Hague, the City of Rotterdam and the Department of Public Works. Governmental parties can't just step into a private limited company – you'd be five years down the road before it was achieved. Then the idea arose that De Verkeersonderneming should be independent, and a foundation was set up by the municipality, the Port Authority and the Metropolitan Region. The Ministry and the Directorate-General for Public Works and Water Management have a cooperation agreement with the foundation.

"The foundation's Supervisory Board is made up of two outsiders appointed by the three local parties: one from the Port of Rotterdam Authority and another on behalf of the Municipality of Rotterdam and the Metropolitan Region. We also have a steering committee, which is ultimately the highest body and includes the directors of the four parties.

More freedom

"Our big advantage is that we can afford slightly more freedom than our parent organisations, but at the same time, we are not a market player. We sit somewhere in the middle. You can clearly see that in our 'let's do it' culture and because we hire a lot of external talent. Of course, we operate within the framework of the law, but we can do everything faster. And because we are a subsidiary organisation of the various parties, they can place orders directly with us in a short space of time, via what's known as 'quasi subcontracting'. Incidentally, as a foundation, we ourselves are of course obliged to invite tenders.

Inspiration from practice

"For us, the user's perspective is of course the most important. We really try to understand why people choose a particular mode of transport. To achieve this understanding, we have divided Greater Rotterdam into five areas and assigned an area director to each. These are external people who have knowledge of the area, for example through entrepreneurs' round tables to find out what the bottlenecks are during their employees' commutes and how we can help.

"We then look at what major projects our parent organisations have in the pipeline - for example, replacement or renovation work which involves major maintenance on bridges or tunnels. You then try to combine the insights, not only to renew the location itself, but to permanently change the behaviour of the people who travel there every day.

"We have also set up a mobility lab. It works on the same principles as a beauty contest, allowing fledgling companies to present their ideas to a jury. This achieves two things. Firstly, through our network, parties like these come into contact with organisations that are able to apply their product - don't just talk about it, test it. And secondly, they meet parties who can provide funding. We are not there to provide large sums of money, which is often the case in these kinds of start-up initiatives. Our goal is to offer them contacts, which is much more valuable. Take Felyx, the green rental scooter. They were looking for funding, but the amounts involved were beyond our means. In addition, they suffered greatly from the negativity surrounding shared bicycles. We arranged for our colleagues at the municipality of Rotterdam to sign an agreement of intent with Felyx, allowing the scooters to be used there for three years. And

raise capital from the bank.

Doing your bit

"In addition to the mobility lab, a few years ago we set up the marketplace for mobility. This in itself is not that innovative, but it did involve the implementation of a large framework agreement. If parties qualify for the framework agreement, it's easier for them to get

because of this security, they were then able to

"We have established a framework agreement, which provides parties with easier access to the companies we work for.

involved with the companies we work for. A similar framework was recently established by the Ministry of Infrastructure and the Environment for the implementation of seven regional Mobility as a Service (MaaS) pilots. We are the lead party in one of these pilots - Rotterdam, The Hague and Airport - and through the framework agreement, the Pon consortium won the tender.

"In Mobility as a Service (MaaS) you approach transport in the same way as you do with a telecom subscription. People put together a transport plan to meet their own individual needs, in the same way that people choose a phone subscription with a certain number of minutes, megabytes or text messages included. Think of a rail pass combined with a public transport bicycle, and a shared car for when you want to go somewhere at the weekend. The promise is planning, booking, paying and travelling with just one app.

"MaaS is currently very high on the hype cycle. We could have said that we would carry out the project in the traditional way, from client to contractor. But this was such a new concept that we decided to make it an innovation partnership and really work on it together. Pon is of course a very large company; not only do they import cars, but they also own Gazelle bikes, for example, and operate shared cars with Greenwheels. In addition, you also want RET, HTM, NS (regional and national public transport providers), shared bicycle providers and the taxi industry to join. We then agreed that Pon would receive a basic amount to develop services and we would create a joint budget, the innovation pot, with an innovation board consisting of representatives from clients and contractors. Pon develops MaaS services in the basic sense, but on the public side, we also want to make an effort and do our bit; we think we owe it to ourselves.

Innovation is not always easy

"These are all projects that provide us with a lot of energy, but in practice, of course, things sometimes take a different turn. Sometimes you present a good idea to the parent organisations, but it fails because they have to comply with national procedures and administrative or political choices. This is frustrating.

"The fact that we are fortunate enough to be afforded a lot of freedom and flexibility does not mean that the organisations we work with also have that luxury. I must admit that we don't always have the answer to that. We continue to lobby the organizations via the paths we have available to us. It remains human work. You need to play the right people, who eventually say: 'We are

not going to wait for a nationwide agreement we're just going to do it.' By creating this atmosphere, it allows progress to be made. And this is the approach we'll continue to take."

"Sometimes you present a good idea, but it fails because of national procedures and administrative or political choices. This is frustrating."



Collaborative innovation canvas

Every cooperation is unique and requires a high degree of customisation and human work. Content determines the legal form. Nevertheless, general learnings can be taken from the examples of collaborative innovation. These learnings include preconditions and steps that can help when setting up a collaborative innovation.

We have compiled these lessons into a single canvas to provide guidance for anyone who wants to innovate beyond boundaries. This is by no means a step-by-step plan. As you have read, much of it is about human relationships and mutual trust. Nor do we see the canvas as a simple fill-in-the-blanks exercise. For collaborative we believe the content is constantly moving and changing, so use it for support and guidance during the shaping of a collaboration.

COLLABORATIVE INNOVATION CANVAS

The steps to innovate beyond boundaries, with government, industry, knowledge institutions and citizen groups.

Subject:	 Date:
	Version:

LEGEND: task collaboration preconditions

DREAM

Formulate a common image of the future, what are you working towards?



This dream can only be achieved with the cooperation of many different stakeholders.

SOCIAL VALUE

What is the social added value, how does it serve the common good?

PROPOSITION

What will you do together with all partners in the collaboration? Develop new products or services? Exchange knowledge? Identify obstacles?

ACTION LINE

What results will be visible in the short term? What will you start working on immediately? The trick is to hold on to the energy in a collaboration. Small steps that contribute to the bigger dream help.

COLLABORATION PARTNERS

Who will you work with and why?

PARTNERS	INTERESTS	CONTRIBUTION
Differentiate between the founding partners: The initiators. The sponsoring partners: Partners who join the collaboration later. And other stakeholders: Partners who are not (yet) partners in the collaboration.	What is driving partners to collaborate: Develop knowledge Good workmanship Broaden network Risk sharing Attract talent Strengthening Cost savings image Contribution Other, such as	What does each partner contribute to the cooperation? Each partner can contribute something different. Think of money, in-kind commitment of people and staff, access to a network, marketing, location or systems. Specify this per partner organisation.
	FOUNDING PARTNERS	
	SPONSORING PARTNERS	
	OTHER STAKEHOLDERS	

FINANCING

What resources do you need to finance the collaboration and projects? Is the Government financing part of the collaboration? If so, pay attention to the rules on state aid and tendering (only applicable if the Government is purchasing).

NEUTRAL GROUND

Sometimes it can help to appoint an intermediary to the collaboration or to have a neutral party host the collaboration in a neutral location. This can contribute to equality between collaboration partners. Think about whether this is necessary for your collaboration.

PITCH

Based on the parts already filled in, prepare a strong pitch that will make others enthusiastic. Get straight to the point: What is the dream?

What will it contribute to society? What is needed to achieve the dream?

Who are you going to do it with? Depending on the audience you're pitching to: What will it contribute to the organisation?

GOVERNANCE

How will you organise the governance for the collaboration? How will you make decisions and ensure that partners feel involved? How will you take care of administrative sponsorship? For governance, focus on a pure relationship with financiers (from the Government): Separate the accountability for the subsidy from the partnership and do not include the subsidy provider in the Supervisory or Advisory Board.

AGREEMENTS AND ORGANISATIONAL FORM

How you record agreements and which organisational form you choose depends on the type of agreements you want to make. This is custom work. Set a foundation by answering the following questions:

Do you want to make agreements regarding liability? How are funding streams organised, where is the money? How will the ownership of co-developments be arranged? How will the legal basis be organised?

Personal notes I form the authors



Giulietta Marani

Within Digicampus, Giulietta Marani is responsible for 'Innovation Beyond Boundaries' - preconditions for collaboration and related approaches that support innovation and support the mission to citizens more control. Giulietta advises on the most suitable methods and tools for each phase of the innovation process, to help speed up collaboration and remove the many barriers that stand in the way. At ICTU she is responsible for the portfolio of collaborative innovations known as Discipl.

"I believe that organisations can only innovate when they pursue the exchange of knowledge and talent beyond organisational boundaries, with inspiration from outside and by putting people and society first. This is also necessary to tackle the major challenges of our time. They call for collaborative innovation. This kind of innovation does not begin and end with experimentation. It requires solid preparation, having the right parties on board, a shared sense of urgency and a clear plan for after the experimental phase. At Digicampus, I look at which form of collaboration and methods of innovation are most suitable. We learn by doing and share our lessons and inspiration. I hope this publication and the twelve examples of collaborative innovation inspire you too."

Tips from Giulietta

Define the value

"Start from a social need or a social problem. Explore that need or problem together with the people concerned. Define the social value you want to achieve, together."

Keep the follow-up in mind

"Start small, experiment with a coalition of the willing. But do not forget that an experiment often has a follow-up. Think about the conditions for adoption. How can you create support today for the innovations of the future?"



Danja von Salisch

Danja von Salisch used to work as an innovation methods consultant at Digicampus. She did research on which methods strengthen collaborative innovation by applying them in practice and including the lessons learned in the Digicampus toolbox. Besides Digicampus, Danja also works on projects where the Government, market, knowledge institutions and citizens work together. Among other things, these are focussed on safety, debt, youth care and democratisation.

"I believe that together we are responsible for the social issues of today. Whether you do this in your role as a citizen of the Netherlands, civil servant, care provider, researcher or entrepreneur, look at where you can contribute to society and get involved. I understand that collaboration and innovation is not always easy and I would like to help you with this.

"Together, we make our society what it is. Without you, me and everyone else, it would not exist. We make agreements together about how we distribute money, we educate each other, we agree to pay interest when you borrow money, and so on. It is also possible to change and renew, to solve social problems where the links may not necessarily connect logically. You cannot always do this alone, you need others. It doesn't matter who you are, as long as you have something to contribute."

Tips from Danja

The end user is the binding factor

"Involve the end user when formulating the problem. This creates a sense of attachment and helps people think beyond their own organisational boundaries and become intrinsically motivated."

Do it together

"Also try to do things and establish things in the beginning. By working together you create trust and motivation."

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