



Afsprakenstelsel
puts businesses
and citizens back
in control of their
own data



On 19 February 2020, the European Commission presented its new data strategy. One of the key ambitions is to restore businesses' and citizens' trust in the third-party usage of their data. An *afsprakenstelsel* (which means 'soft infrastructure' or 'data-sharing scheme' in Dutch) is the ideal instrument for putting them back in control of their data. This is essential if we are to rebuild the much-needed trust in data sharing, which will form the foundation of the emerging transactional internet. How does an *afsprakenstelsel* differ from a data platform? Read on to find out.

The core message of the European Commission's recently published data strategy can be summed up in a single sentence: "Ensuring better access to one's data and its controlled and responsible usage". Businesses and citizens must gain not only formal control but also practical control over their data, including being able to re-use it elsewhere under the right conditions (in other words, with consent). This is aimed at preventing the data lock-in that participation in a platform often entails nowadays, by establishing a 'level playing field' for data. A more secure, controlled and fair flow of data will stimulate innovation and ensure that everyone in society benefits from a digital dividend.

Just as the world has developed ways of minimising industrial pollution over the past century, we must now focus on doing the same for 'data pollution'. The solution lies in decentralised, public/private and secure infrastructure in which data can flow freely. This infrastructure should be governed by agreements on legal, operational, functional and technical aspects – in other words, 'soft' infrastructure (also known as an *afsprakenstelsel*)

for data sharing. Watch this video to find out what exactly an *afsprakenstelsel* entails, and how it differs from physical 'hard' infrastructure such as roads, bridges and cables.

Not a platform, but an *afsprakenstelsel*

Although we may not realise it, we all use *afsprakenstelsel*-based services in our daily lives. An *afsprakenstelsel* provides the trust framework or scheme for all kinds of everyday tasks, such as withdrawing cash from a bank other than our own, making online payments and exchanging data using mobile devices. *Afsprakenstelsels* have the potential to take entire markets to the next level of digitalisation, without the common drawbacks of centralised data pools.

But if a data-sharing *afsprakenstelsel* is not a platform, what is it instead? Before clarifying what exactly an *afsprakenstelsel* is, let's first take a look at the two ways in which most data is currently shared: 1) based on bilateral agreements, or 2) through a platform.



1. Bilateral, tailor-made connections

The traditional method of sharing data between two parties is to establish a set of bilateral agreements. If a company wants to share data, it must set up a tailor-made connection (including both a technical integration and a legal agreement) with each direct business contact, which is often costly and time-consuming.

For example: Company A must set up tailor-made integrations with the ERP systems of three of its direct business contacts. This means that Company A must reach agreement – and must draw up bilateral contracts – with each of these three parties about various aspects related to data sharing. How can they establish a secure connection? How will users and/or machines be identified and authenticated? How will it be determined what those users or machines are/aren't allowed to do? And – last but not least – which legal agreements will govern the data sharing?

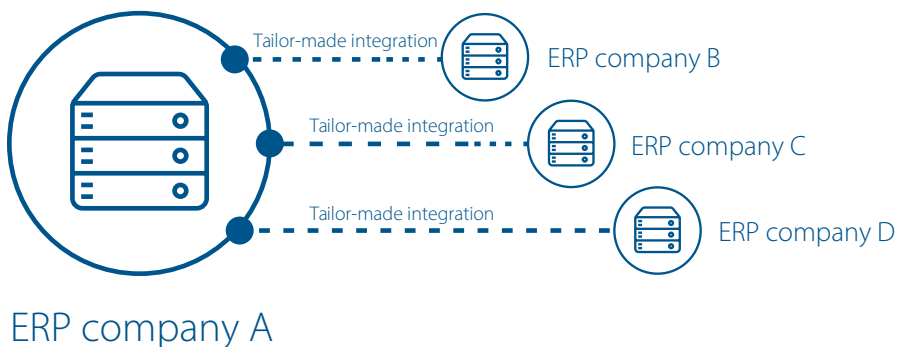


Figure 1: The traditional method of data sharing: a company must reach bilateral agreements with each other company with which it wants to share data.



2. Data platforms

Platforms facilitate easier data sharing by forming a more direct connection between different parties and eliminating some of the inefficiencies mentioned above. Data can be uploaded to the platform and shared with multiple parties simultaneously. The platform determines – either in consultation with its participants or not – who can gain access to the platform, and to which data from which party. In the example mentioned above, this would mean that Company A only needs one tailor-made connection with the platform. The platform then gives Company A access to the data of other parties that are also connected to it. That saves time and money.

But this is not without its disadvantages. Because the data is stored on the platform, Company A may no longer have full control over it. Besides that, data can only be exchanged with parties that use the same platform. There are different data platforms for different types of data, leading to fragmentation and sub-optimisation. After all, it is not usually possible to share data with other platforms (known as 'data portability'), which means that most companies still have to set up multiple tailor-made connections, which once again is costly and time-consuming.

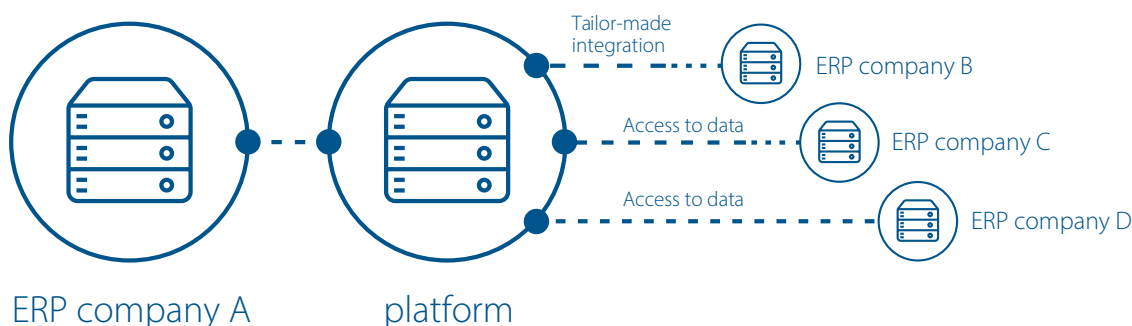


Figure 2: Data platforms require only one tailor-made connection to give multiple companies access to data.

Afsprakenstelsel

An *afsprakenstelsel* is a new paradigm for data sharing. A data-sharing *afsprakenstelsel* is focused on facilitating the access to data. An *afsprakenstelsel* is a uniform set of functional, technical, operational and legal agreements dictating how all parties in a particular ecosystem can share data with one another.

Such an *afsprakenstelsel* comprises a minimum set of agreements with a central governance function, managing the agreements and supervising compliance. This guarantees harmonisation, while still leaving sufficient room for differentiation and competition. Because all members of the ecosystem know how they can exchange data and also which

agreements the others must comply with, they are more willing to share data – irrespective of whether it is stored in their own systems or on a data platform. Trust in the ecosystem is ensured through multilateral technical specifications and contracts.

An *afsprakenstelsel* is also an effective instrument for organising authorisations, making it ideal as part of consent infrastructure in which data owners retain control over their own data. After all, empowering citizens and businesses to decide for themselves who has access to their data and under which conditions will foster the necessary trust in data sharing.

Consent infrastructure

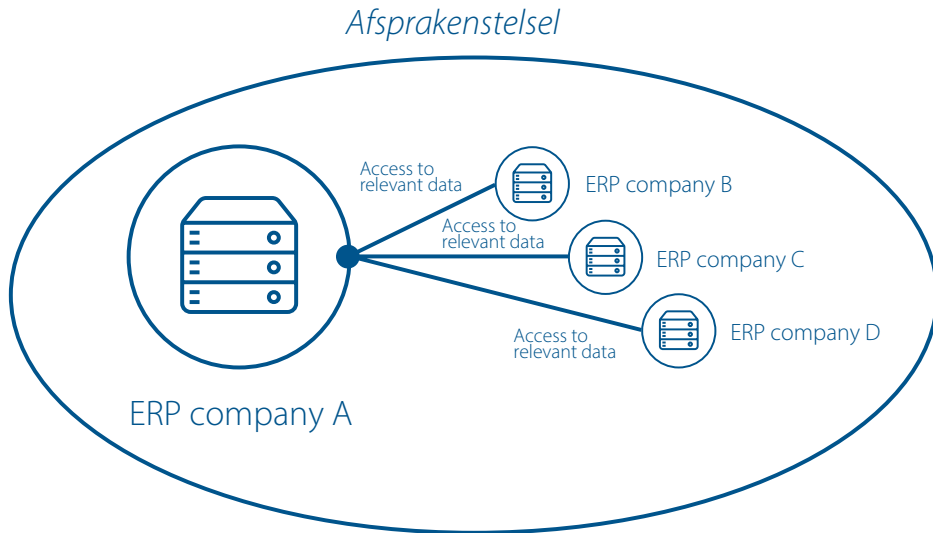


Figure 3: The *afsprakenstelsel* provides the trust framework so that multiple companies can access relevant data while it remains stored at the source.

In the example above, the *afsprakenstelsel* would mean the following: Company A can directly share data – without time-consuming and costly integrations – with other organisations that have also accepted the uniform agreements of the *afsprakenstelsel*. After all, the company knows precisely what this entails. Furthermore, Company A retains full control over its own data because the data continues to be stored at the source. Rather than data being transferred to third parties, the *afsprakenstelsel* means that third parties can merely gain access to the relevant data.

An *afsprakenstelsel* is also relevant when the data is uploaded onto a platform rather than being stored at the source. In this case, the agreements ensure that parties can connect with data platforms easily and repeatedly. Therefore, platforms are typically part of ecosystems governed by an *afsprakenstelsel*. Alternatively, the agreements can be used to manage how parties utilise data that they have obtained from the platform. In the example above, an *afsprakenstelsel* could mean that Company A can connect to one or more platforms in a single, easy and uniformly agreed way, plus it is immediately clear what Company A may do with the data that it accesses via that platform.

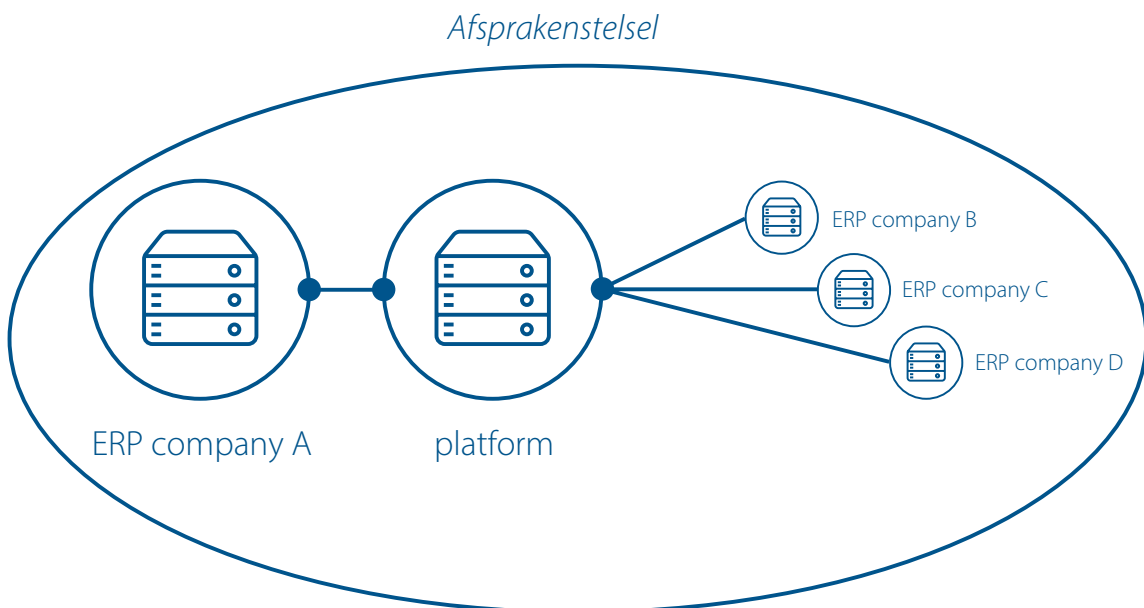


Figure 4: The *afsprakenstelsel* provides the trust framework so that multiple companies can access relevant data while it remains stored at a platform.

Afsprakenstelsels in the financial sector: withdrawing cash from different banks

The *afsprakenstelsel* concept originated in the financial sector. For example, one financial *afsprakenstelsel* enables consumers to withdraw cash from different banks than their own. That was impossible 30 years ago. The first cashpoints were primarily intended to relieve the workload for a bank's own employees and were commonly located inside the bank. Banks subsequently started installing them outside and allowed customers of other banks to make use of them too. To facilitate this, the banks multilaterally agreed on the conditions governing cash withdrawals from other banks and how such withdrawals would be processed 'behind the scenes'.

Another example: online payments from bank accounts

Another example from the financial sector is the transfer of money from bank accounts to make online payments. In the Netherlands this is governed by the *afsprakenstelsel* called 'iDEAL'. Initially, each bank invested in its own online payment solution, but it soon became clear that no single bank would succeed in achieving market dominance with its own solution. To address this situation, a number of leading Dutch banks developed a set of agreements together as the basis for enabling all their customers to pay online, in a simple and uniform way, without undermining competition or losing their own identity. Since then, almost all other banks in the country have decided to participate in the iDEAL *afsprakenstelsel*.

Afsprakenstelsel for data sharing in logistics

It has become apparent that the financial *afsprakenstelsel* concept is not only beneficial for financial transactions, but can also be used for data sharing (data transactions) in other sectors. One good example of this in the Netherlands is the iSHARE *afsprakenstelsel*, which was initiated to stimulate data sharing in the logistics industry. The *afsprakenstelsel* facilitates the access to data (identification, authentication and authorisation) so that logistics organisations can share data in a simple, uniform and controlled manner. By utilising one another's transport capacity, for example, they can collectively improve the efficiency of the sector and help to reduce CO2 emissions.

The path to an open economy

The European Commission has rightly concluded that there is a growing need for trust in data, both in the economy and in society as a whole. The way to restore that trust is to put businesses and citizens back in control of who has access to their data and why. An *afsprakenstelsel* gives them this control, or 'data sovereignty' without erecting a huge security barrier around the European market.

In fact, an *afsprakenstelsel* instils in businesses and citizens the necessary trust to share data safely, uniformly and securely with both known and as-yet-unknown parties. As a result, an *afsprakenstelsel* not only supports the implementation of the European Commission's data strategy, but also contributes to achieving a human-centric, thriving and balanced data economy.

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