

What is VISI?

Standardisation of ICT in the building industry

The building industry is characterised by varying collaborations between different parties. From the birth of an idea to its eventual application and management, new collaborations are constantly being formed. Some parties are involved with a project for a longer period of time, while others come and go. Good communication between parties is of the utmost importance for efficiency. Prompt confirmation of alterations by all building parties or the prompt availability of the latest version of a detailed building plan have an immense influence on the quality, completion time and cost of a project.

Project partners experience lack of communication as a bottleneck in building practices. At the beginning of 1998, a number of organisations from the building industry came up with a plan to formulate agreements about communication between partners in construction projects. This plan formed the beginning of what is now known as 'VISI'.

VISI is the Dutch acronym for 'Terms & Conditions for the Implementation of Standardisation in ICT' and has the following objectives:

- Parties have access to generally applicable agreements concerning the content and design of communication;
- On the basis of these agreements, parties are able to enter into joint ventures more quickly and flexibly and to establish communication structures;
- Parties are capable of being more accountable to the outside world and of increasing the quality of their product.
- These agreements enable a better use of resources in information and communication technology (ICT).

Simply put, VISI's objective is to create unequivocal agreements concerning the (digital) communication on the interfaces between parties in building projects. These agreements must lead to parties being able to locate one another blindly.

Objective

In VISI, the building sector works on the development and implementation of standards (VISI frameworks) for digital communication between co-operating project partners. VISI is intended to increase the transparency and traceability of the building process and to contribute to the optimisation of quality, efficiency, duration, cost and process management on building projects.

How does it work?

Agreements that have been developed relate to communication that is necessary to properly establish formal transactions between partners on a building project. For example, for the benefit of dealing with alterations or the submission and approval of a payment schedule.

The agreements developed by VISI have been combined for particular areas of application. Such a combination of agreements is called a VISI framework, which is used for the communication between the employer and the contractor.

About CROW

To develop knowledge, manage it and make sure it is applied in practice, that is what CROW does. Providing exactly what the practical situation requires at the right time and in the right place. This not only concerns the more specialised technical information in the form of manuals, guidelines and recommendations, but also instruments and methods for an integral approach in support of policy development, preparation and implementation.

Councils, co-ordination commissions and working groups form the heart of CROW. Every year, over 1,000 external professionals work to achieve CROW's goal: the development, dissemination and management of practical information that can be used in policy preparation, planning, construction, management and maintenance in our field of expertise. Participation in councils, co-ordination commissions and/or working groups ensures that CROW products are geared to the wishes of the users.



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What do those agreements cover? The key component is made up of a collection of messages in the shape of forms that require filling in. These messages are ready-made for use in practice and each one has specific data elements, dependant on the objective of the application. The VISI framework, for instance, includes a message for the submission of a payment schedule; in that message, we see data elements that indicate what payment schedule number it applies to and what amounts are applicable.

Alongside the messages, the framework provides for other issues, such as which messages belong together for finalising a particular procedure. The order in which the messages are written is also included. Submission of the payment schedule, for example, starts with the 'payment schedule' message, which is submitted by the contractor. The employer can then choose to answer with a 'rejection of payment schedule' message or 'temporary approval of payment schedule' message, etc. The collection of messages for the finalisation of such a procedure and the establishment of the order is called a transaction in VISI.

Finally, in terms of communication it is important that it is clear who the messages come from and where they are going. In a VISI framework, this is laid down by means of roles. There are always two roles involved in a transaction.

To shed light on how VISI works in practice, we will discuss the following subjects:

- The use of a VISI framework;
- The application of VISI in project preparation;
- What is necessary for practical communication in accordance with VISI?

The use of a VISI framework

The VISI organisation makes VISI frameworks available for particular areas of application. The framework has a digital form and is put together according to fixed rules called the VISI system. The system is important for IT specialists. You can find more information about this system here. Because of the digital form of the framework, automated information systems can read the framework and then directly support the prescribed communication. One condition is that the relevant information system is VISI compatible. Various information systems on the market already satisfy this condition.

The application of VISI in project preparation

The VISI frameworks that have been made available by the VISI organisation consist of a series of agreements that are standard in the building industry but that are also flexible enough for customisation within the context of a project. In consultation with the partners, the framework can be adapted to create what is known as project specific VISI framework. For partners in the project, this framework forms an unambiguous agreement on formal communication between them. In principle, these agreements could be followed up on paper, but the step to digital communication is a small one.

What is necessary for practical communication in accordance with VISI?

An important step is taken with the establishment of a project specific VISI framework, in which communication is secured in terms of roles, transactions, messages, message sequencing and data elements. The next step is to establish how the roles are to be filled in. This means that it is established which role will be filled by which organisation and which person. These details are recorded in a project specific message.

Finally, a choice must be made about which information system to use. Parties can decide to use a system collectively or individually (or a combination of the two). For information systems providers, the VISI framework and project specific message are important starting points to quickly support the desired communication.

Alongside the communication between project partners, internal company systems can also be linked if so desired. IT specialists can create this link on the basis of the VISI system.

CROW targets professionals involved in policy preparation, planning, design, construction, management, maintenance and use of infrastructure.

CROW's activities are clustered into six themes that cover the entire policy cycle, from the plan via construction to management.

- Public Space
- Environment
- Mobility & Transport
- Infrastructure
- Tendering & Contracting
- Building Process Management