This is an example for the usage of the mvar system in IATEX.

You can import transfer files inside or outside of the \begin{document} using \loadvariables{d}{test.txt} where d is the namespace given to the loaded variables from the transfer file test.txt. In the source for this pdf example.tex I have done so below:

The transferfile test.txt contains a variable tt with the value  $1e - 05^1$  which can also be displayed with its (SI-) unit to  $1 \times 10^{-5}$  N. This is being archieved with \mvar{d}{tt} and \mvarsi{d}{tt}.

That file also contains a symbolic expression (formula)

$$\frac{1}{r}. (1)$$

The following text has been loaded from the transfer file: exported text This following variable ( $d_3$  from the file ./unterordner/test6.txt) is a vector directly exported from Matlab:

$$d_3 = \begin{pmatrix} 13.000 \\ 15.000 \\ 149.000 \\ 132.000 \end{pmatrix}$$

Its transfer file has been loaded as the namespace t in another file in a subdirectory of this example.tex after its usage. This is possible due to the precompilation, which allows for free restructuring of your document without worrying about breaking references.

If you want to use logical building blocks for automated documents, you can use logical variables which uses 1 for True and 0 for False. This can be used with  $\mbox{mvaristrue{[namespace]}{[var name]}{[text if True]}{[text if False]}}$ . Example: This text is printed if the variable logic in the namespace t is 1 (True)

The following list of abbreviations has been automatically generated during precompilation:

| Bezeichner | Wert   | Einheit Beschreibung |   |
|------------|--------|----------------------|---|
| a          | 1      | -                    | - |
| b          | 2.5675 | -                    | - |
| b          | 2.568  | -                    | - |
| c          | 45     | -                    | - |
| c          | 45     | -                    | - |
| $d_{!}3$   | 1234   | -                    | - |
| $d_3$      | 456    | -                    | - |

 $<sup>^1 \</sup>text{If you want to have it in the correct notation you can encase it in the num command to show <math display="inline">1\times 10^{-5}$ 

| logic | 1     | - | - |  |
|-------|-------|---|---|--|
| t     | 0     | - | - |  |
| tt    | 1e-05 | N | - |  |

It only includes numerical variables or abbreviations that don't have a value (the default value -).