

# Standards Development

## Application Scenarios





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## Standards: Curse or Blessing?

The exchange of data on the basis of standards is increasingly demanded. But what are the benefits of standards in general or do they only involve costs and effort? And what use are standards if there are several standards for the same requirement?

## Cost Savings

The use of standards can lead to immense cost savings. ERP, TMS or financial systems can be linked together more easily using standards. Processes can be optimized because the data flows become transparent. Organisations can decide and act proactively instead of just reacting.

## Individual Requirements

If standards are used correctly, individual requirements can be mapped transparently. The receipt or provision of data is simplified for business partners.



## Common Understanding

Even within the same industry the same terms are often used with different meanings. For example, does the ETA indicate when a ship passes the port gates or when it arrives at the dock? Semantic standards help to create a uniform understanding across organizations.

**What is the  
Estimated Time of Arrival (ETA)?**



10:00

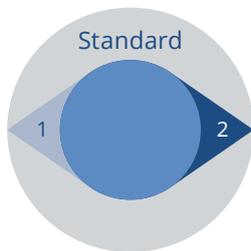
10:45

**FROM AUTOMOTIVE INDUSTRY TO  
WORLD CUSTOMS ORGANISATION  
WITH GEFEG.FX**

Many standards are already created with our solutions: From the automotive industry via EDIFACT to World Customs Organisation. Standardisation organisations, industry associations and single companies are already using the advantages of our solutions:

**Contextualization**

Often standards already exist in an industry or for a specific topic. Nevertheless, individual requirements must be represented. GEFEG solutions can be used to define standard-compliant solutions that take individual requirements into account.



**Convenient Governance**

You can't do without rules. But compliance and implementation of rules must be convenient: With GEFEG solutions, technical experts and implementers will automatically adhere to governance and create solutions that are compliant with the underlying standard.

**Collaboration**

Standards are not created in dark cellars by individuals. Rather, technical experts within a company, across companies or even on a global level, work together to develop standards. Therefore it is essential to have a development environment that supports both the business and technical experts. Version histories, data repositories and the possibility to publish data structures differently depending on the target group are a matter of course with GEFEG solutions.

 Electronics	 Automotive Industry	 Finance and Insurance
 Industry	 Trade / Wholesale Trade	 Information Technology
 Consumer Goods	 Logistics & Transport	 Public Administr. & Customs

# ADVANTAGES OF OUR SOLUTION

## Use standards simply

So how do you define the required data structure based on a standard? GEFEG already provides many standards so that you can start right away. Your own technical terms and requirements can be easily documented. Glossaries, manuals, or technical specifications can be created from them and made available to experts, implementers and developers. And of course in any number of languages, including traditional Chinese.

Of course, the existing internal data structures can also be aligned and mapped with the standards. Thus, gaps can be identified and closed directly.

## Simple Onboarding

Once the standards have been defined, they will of course still have to be implemented. GEFEG's onboarding solutions enable implementers to validate the quality of their implementation. Errors are already detected during the implementation phase and not only during live operation. IT departments are relieved and costs are reduced.

## Maintenance and Service

Standards are also changing. However, maintenance and service need not be expensive and complicated. GEFEG makes changes visible and usable. Once defined, requirements are retained and can be transferred to the new version with a click.

The image displays two overlapping screenshots from the GEFEG.FX software. The background screenshot shows the XML Schema Editor interface, with a tree view on the left showing the hierarchy of elements for 'ProcessGlobalInvoice'. The foreground screenshot shows the 'Onboarding-Portal' web interface. The portal has a navigation bar with 'DOKUMENTATION', 'VALIDIERUNG', and 'IHRE ANFRAGE'. Below the navigation bar, there are two search boxes: 'Wählen Sie eine oder mehrere Nachrichten aus:' and 'Wählen Sie einen Referenz-Standard aus:'. The search results for the second box show a list of standards, including 'FACTUR-X:1.0;EN16931-COMPLIANT (FULLY)' and 'EN16931\_LUBL\_CreditNote;2017-10-18;Check'. Below the search results, there is a table with columns for 'Nachricht', 'Hochgeladen', 'Größe', 'Referenz-Standard', 'Status & Aktion', and 'Ergebnis'. The table contains two rows of data, one for 'ZUGFeRD-einfacheRechnung.xml' and one for 'CII\_example05.xml'. The 'ZUGFeRD-einfacheRechnung.xml' row shows a status of 'Validierung abgeschlossen' and 'Ergebnis' as 'Validierung abgeschlossen'. The 'CII\_example05.xml' row shows a status of 'Validierung abgeschlossen' and 'Ergebnis' as '1 Fehler'.

FACTUR-X / ZUGFeRD – Hybrid calculation of the French / German economy

EN16931 – European standard for electronic invoices

XRechnung - Implementation by the German administration

EDNA - Implementation of the energy industry  
with XRechnung and ZUGFeRD/Factor-X

**edna**  
Bundesverband Energiemarkt  
& Kommunikation e.V.

## Simple. Conform.

EDNA, the German Federal Association for Energy Market and Communication, has dealt with the standardised and automated communication of electronic invoices in its working group. The creation of electronic invoices is mandatory for some public clients as of 27.11.2020. These must comply with the requirements of the XInvoice and in particular EN16931. However, the standard does not provide a standardised solution for the special requirements of the energy sectors. However, meter readings and similar information are indispensable, especially for automated invoice verification.

EDNA has relied on GEFEG solutions to develop its industry standard. Especially the possibility to work on a standard together with several organizations was important. With the publication of the standard EDNA relies on the onboarding solution of GEFEG. Implementers can easily check their invoices for conformity with the EDNA standard and thus ensure that they can also be processed by the German administration.



„Especially in the energy industry, the topic of standardization is playing an increasingly important role. Our industry sometimes has very specific requirements, for example when it comes to electronic invoicing. With the help of GEFEG's solutions, we can easily map our requirements to existing standards. In this way we achieve a uniform implementation in the industry and the member companies can use the cost savings more quickly.“

**Dirk Heinze** President EDNA-Bundesverband



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