Chapter 1

Introduction: Purpose and Structure of this 3 part E-book
Purpose and Background

The main goal of this E-book is to give an introduction into the topic of multilingual SAP landscapes and translation. Inform customers on a high level about important things-to-know about SAP translation and give guidance on translation decisions – which aspects to consider for translation in SAP systems.

Background:

- Request for an E-Book on translation topics originated from the German-speaking SAP User Group DSAG.
- Originally planned with active DSAG member participation – decided to change this to active partner participation: co-creation between SAP and 4 SAP Language Service Partners offering Language Consultancy Services: Lucy Software, Morphologic, text&form and Wordflow.

Initially, the idea was to have a strong customer involvement, but understandably, time restraints on customer side prevented a high level of customer interaction.

Since it was very important for us to offer information relating to the daily customer reality, we asked 4 of the SAP Language Service Partners to co-author the E-book based on their wide experience in SAP customer translation projects. Those partners are Lucy Software, Morphologic, text&form and Wordflow.
Focus and Structure of the E-Book

This E-book primarily focuses on translation of customer developments and customer data in the ABAP environment, based on Netweaver 7.4.

As for S/4 HANA, the information in the E-book applies also to S4/HANA on-premise, the translation processes are similar to ABAP processes. If required, we can also create follow-on E-books with detailed information on certain other topics, for example translation of Cloud Content and Fiori.

Even when limited to ABAP, the information was still extensive, and therefore we decided to create the book in 3 parts, which can also be read individually as independent E-books. The order of topics was chosen according to the usual process phases in a customer translation project:

- Part 1: Decision Making and Strategy, plus Scoping
  These are always the first phases in a translation project, or actually, even earlier, when you ask yourself if translation is even necessary.
- Part 2: Organization and Tools
  This part focuses on planning aspects, including terminology, and the selection of the right tool, SE63 or another tool, and elaborates on pros and cons of both options. In chapter 7 at the end of Part 2 you will find a list of non-SAP tools.
- Part 3: Translation Execution, Maintenance and Resources includes information on the actual execution phase, when translation is being created and delivered, as well as information on activities which take place after translation delivery, such as handling upgrades and re-use of translation. The chapter also includes information about resources and translation pricing.
Chapter 2

Important Planning Aspects to consider for Translation
Important Planning Aspects to Consider for Translation

This chapter gives an overview of the most important planning aspects of a translation project, like scheduling, budgeting and resource planning. In the first part, we will introduce the technical aspects. These are system landscape, language dependencies as well as tools and resources. The second part is about important project management aspects, like understanding the statistics, questions about project planning and scheduling. Finally, we will touch on cost planning aspects.
One of the most important steps in preparing a system translation project is to identify the affected systems. This covers three steps:

- In which system is translation relevant content created?
- In which system should the translation be performed?
- In which system will the translation be deployed?

Depending on the number of systems, there can be different scenarios: from translating in the development system to having a dedicated consolidation system for translation.

Another important aspect is the status of the system. The following factors should be determined:

- The NetWeaver release, because this may have an impact on the technical possibilities,
- The codepage of the systems, and
- The internationalization configuration state of the systems, like logon languages, installed languages, client maintenance, support package level etc.

Depending on these factors, some basic administration activities have to be planned and performed before translation can even be started. We should also investigate if there is any legacy translation available from the past which could be reused or transported into our translation system.

Finally we have to plan how we can deploy the translations and which transport routes are available in the system landscape.
The next step is to define the source and the target languages. We have to identify development languages and define the order of translation in case of more than one source language.

Before project start we have to consider which source languages there are.

It is a typical pitfall to think that there is one development language, only to find out, after an initial evaluation that some developers created objects in different original languages. Master data and customizing content may even be created in multiple different source languages.

In this example, we have the typical situation that we have two development languages, German and English.

French translates from source language German, Spanish from source language English, Portuguese translates from two source languages, both German and English. The Spanish translation can only be completed when the objects developed in German, as an original language, have been translated into English.

And French can only be completed, when the German translation from English, has been finished. This means that the evaluation of a target language cannot be completed until all development languages are synchronized.
When planning the translation project, we should consider the NetWeaver release of the translation system, as the standard functionality may be different in the different NetWeaver releases. For example, as of NetWeaver 7.3, there is a built-in tool for exporting and importing system translation content into Excel or XLIFF.

SAP provides standard translation tools and utilities in the ERP system which are available to every SAP customer. With these tools, all translation project tasks can be performed. However, there may be circumstances where external tools may be more helpful.

Depending on the volume, the development lifecycle, the content type and the choice of translators, we should decide if we translate in the SAP system translation environment around transaction SE63 (online) or outside of the SAP system (offline). For example, if development and customizing is almost finished, and the content is small, exporting the content and performing translation outside of the SAP translation environment might be a good decision. In this case, the usage of an external Computer Aided translation tool or CAT tool may speed up the translation project. If development is still in progress, and the translation volume is large, it is recommended to translate in the SAP system itself.

For more details about the translation tools, please refer to chapter 5 for SE63 and chapter 7 for non-standard SAP tools.
The standard SE63 translation environment provides a statistics tool for monitoring the workload. This can be called up with transaction SLLS. It displays detailed translation statistics for the selected objects. The statistics shows the total number of lines including their status (new, modified or translated). Once the figures of the statistics are available, it is important to have the right understanding of the figures for resource planning and scheduling purposes.

It is important to know that the translation effort of the different object types may be significantly different. For example, system message texts are usually a complete sentence, while menu items typically contain one or two words. The translation of long texts like SmartForms is often more complicated than the translation of strings. The status of the translation (new, modified or translated) has also an impact on the workload. All this together may result in a different workload for different objects, even if the number of lines is similar.

So working with this statistics functionality requires a good insight into the SAP translation environment, in order to be able to interpret the figures in a correct way and to decide on required actions.
Resource planning is one of the most important steps during the planning of a system translation project.

One of the core decisions is to decide if internal or external resources should be used. This decision typically depends on the project size and complexity. The other important planning factor are the many different roles required in a system translation project: not only translators. System administrators and developers may be involved at the project start during the scoping phase; representatives of the business units may be involved to fine-tune the relevant customizing content; end users will be used for testing, and it is always recommended to have one dedicated project manager who is authorized to make decisions.

More detailed information on resources will be explained in **Part 3, Chapter 3, Roles, Resources and Pricing** of this E-book.
Translation typically takes place at the end of the roll-out phase. Therefore it is very important to plan translation activities in advance, so it doesn’t become a bottleneck for final roll-out.

The actual execution phase of the translation is just a part of the whole effort. We should always calculate with a preparation phase for scoping, as having the right scope pays off later in the test and deployment phase. For the execution phase we should consider the different language dependencies, and plan some buffer for follow-on languages which are translated from a different source language than the development language.

We should also plan some time for testing and correction activities, since these activities play a very important role in the overall project.

We should always keep in mind that translation is highly dependant on the status and intensity of development and customizing activities.

Finally, as an ERP system is always dynamic, planning should be done for managing new content which is created after the initial translation phase, that is the delta management.
This slide focuses on pricing as a planning factor. More detailed information on different pricing models will be offered in Part 3, Chapter 3, Roles, Resources and Pricing of this E-book.

When we speak about cost planning, we have to know which pricing units can be used in system translation projects. In the previous slides we have already seen that short text or long text lines are the essential units in system translation.

For planning and forecasting purposes, we can use the number of lines and calculate with a flat line price. The advantage is that we have fixed prices already at the start of the project. The disadvantage is that internal repetitions and proposal pool matches are not taken into account.

Another option is to agree on a time and material based pricing, which means we use different line prices for created lines and for copied lines. For this, we can use the so-called TPMO-based pricing, which is available in NetWeaver 7.0 and above.
TPMO is the name of the transaction with which we can measure the number of translated lines for short texts, differentiated by status (that means created or copied lines). The advantage of TPMO is that it enables effort-based pricing. The disadvantage of TPMO is that the result is only available at the end of the translation project and cannot be used to make an exact cost forecast. Transaction TPMO is not available for long text lines. Therefore, these long texts are often calculated and payed for on an hourly base.

If translation is performed outside the system, it is possible to agree on a word-based fixed price based on the analysis of the source material.
Chapter 3
Terminology: How to use Terminology Resources
A well-defined and consistent terminology with predefined terms in all languages enables an organization to be compliant with standards and legal requirements and avoids misunderstandings across all units of the company.

The use of consistent and precise terminology within and outside your company is essential to guarantee the quality of a company’s products and services. In other words, to guarantee the success of a company.

This chapter shows you how to leverage the powerful functionality of SAPterm. It also explains how you can enhance the available SAP terminology with your own corporate glossaries and collection of terms. We must mention that there are other terminology tools available in the translation industry, but those are out of scope, since we can only describe our own tools in detail.
Chapter 3 – What is SAPterm?

- SAPterm is SAP’s terminology database, containing thousands of SAP-specific terminology entries with their translations into other languages.

- SAPterm and its contents are available as a standard transaction (STERM) within your SAP ERP systems. According to your authorization level, you can display, change and create new entries*.

- Alternatively you can easily access the public version of SAPterm on the Internet (sapterm.com). Here you can only display terms.

- Please note that you must first import the language files (as described in chapter 1.4 Language Architecture) for the target languages you need, before you start using STERM.

- SAPterm is SAP’s terminology database, containing thousands of SAP-specific terms and definitions in English. Most of these terms are translated into other languages and hence provide a valuable source of information.

- SAPterm and its contents are available as a standard transaction via the transaction code STERM and is automatically delivered as a part of the SAP Netweaver installation. The contents of SAPterm in the different languages are available after you have imported the respective Netweaver language files.

- A public version of SAPterm is available on the Internet via sapterm.com. Here, you can only display terms whereas system transaction STERM, allows you to create or change entries.
You can use SAPterm to ensure that the terms you are using in your custom developments are consistent with the terminology used by SAP. We recommend to stay consistent as much as possible with the SAP standard terminology so as to avoid inconsistencies between your additional developments and the standard transactions.

SAP terminology is organized by domains, based on the application components hierarchy.

- Depending on the subject area, a term in the source language can have different equivalents in the target language.
- You can search terms using wildcards.
- You can search in any given language combination.

You can use SAPterm to ensure that the terms you are using in your custom developments are consistent with the terminology used by SAP. We recommend to stay consistent as much as possible with the SAP standard terminology, so as to avoid inconsistencies between your additional developments and the standard transactions.

When looking up terms in SAPterm you will notice that they are organized by domains. A term can appear in different subject areas because it may have different equivalents in the target language. For example the German term “Abrechnung” has different equivalents in English, depending on the application it refers to.

With SAPterm you can also look up terms with a generic search using wildcards. You can search in any combination of available languages.
After having prepared the SAP translation environment and before starting with translation, we recommend to define the project-related terminology which is specific to your company in your source language. If external translation partners are involved, they should be responsible for term translation into the respective target languages.

Especially for larger projects we recommend to appoint an internal terminology coordinator to manage the entire process and coordinate all parties involved (that is, external translation partners, internal developers and responsible departments).

The translated terminology should be submitted to selected key users of the respective target countries for approval. This increases acceptance when rolling out a new software in the target countries.

You can enter the company-specific terminology that you have defined in SAPterm by creating a customer-specific component and also adding sub-components if necessary. This will enable translators to provide a consistent translation of your custom developments.

SAPterm contents can be downloaded in a variety of file formats to feed your corporate glossaries or other term repositories used in your company.
Chapter 4

Which Translation Tools to Use? (SAP SE63 or....)
There’re two basic tool choices available for SAP translation – translating in the SAP system using transaction SE63, or exporting the texts from the SAP system for processing in Microsoft Excel or translation industry tools, the so-called “externalization” approach.

Working with SE63 means that translators have a user in the SAP system and they translate the objects using an SAP standard tool that was developed specifically to translate ABAP-based developments. SE63 is also used internally at SAP for this purpose.

For externalization, there is an SAP Standard functionality available as part of the SAP NetWeaver release 7.31. It can be accessed via transaction LXE_MASTER. It exports all the texts in an object list to the XLIFF format, which can be read by translation industry tools. It can also be exported to Microsoft Excel. After the texts from the SAP system have been translated using these tools, the translations can also be imported again via transaction LXE_MASTER.

There are also a considerable number of non-SAP tools in the market that offer similar functionality.
Let's first take a look at some of the advantages of using SE63 for an SAP translation project. Firstly, SE63 is part of the SAP standard delivery, which means there is no need to purchase and install additional software.

It also has a number of unique capabilities, such as various built-in features for re-using existing translations and for performing quality assurance measures, such as change log functionality for looking up the translator who entered a translation, and a host of scoping and project management features. The functionality of SE63 is described in more detail in the next chapter.

For the individual translator, SE63 offers ways to look up context information for the texts they are translating, either directly in SE63, or by using developer transactions, which make it considerably easier to enter correct translations.

Another important point is that SE63 ensures that translations that are entered can be maintained later. For example when their original texts are changed in development or due to an upgrade.

Finally, there are often problems originating in development that are affecting translation, such as developments done in the wrong language or texts split across multiple lines. These issues can be identified when working in SE63, but are near impossible to troubleshoot using a file exported from the system.
On the negative side, SE63 is a relatively complex tool, which is why translators need to either have experience using this transaction, or they need to be trained. This means that the best option is often to use external resources like SAP Language Service Partners. Using SE63 also means translators need system access, which is not possible in some scenarios for security reasons.
In this slide, we will only be focusing on the merits and problems of the externalization functionality using `transaction LXE_MASTER`. However, the majority of the points apply to any externalization tool.

On the plus side, when you export texts to a widely known format or tool, the tool side of translation will be much simpler, which means there is no training or previous knowledge of SAP required. However, the translators will still need to be familiar with SAP-specific terminology.

Looking on the negative side, the absence of any ability to look up context information in the SAP system, from which texts were exported, may lead to a much higher rate of translation mistakes. This can cause hidden costs that only become apparent in a user acceptance test, when testers create tickets due to incorrect translations. Also, not all object types can be exported, such as F1 help texts or Smart Forms.

For bigger projects, or when Microsoft Excel is, for various reasons, not the right translation tool, it may also be necessary to invest in a professional computer aided translation (or CAT) tool, that can be used to translate the exported XLIFF files. This may of course add to the project costs.
As a rule, the bigger and the more complex a project is, the more cumbersome an externalization solution will become. There are a number of scenarios that are not well supported, meaning that they cause significant project management overhead, or that they are not possible at all. Examples include projects where, there is ongoing developments, regular imports and exports are required, and objects that are “checked out” for translation may change before the translations are imported.

Updating translations to match changed source texts is also not easy. This is a scenario that will certainly come up after an upgrade, if not before. With some externalization tools, updating translations after source text changes is not technically impossible, but only with huge effort. Very large translation volumes will also cause problems for external translation tools, for performance reasons if nothing else.

There are also specific issues that apply to some externalization tools, but not to others. When exporting with LXE_MASTER for example, it is not possible to enter different translations for two instances of the same source text in a translation object, even if the second instance needs to be translated differently from the first.
Here are some examples of scenarios in which either SE63 or externalization may be a better fit and the recommended tool. It has to be said though that there is no one-size-fits-all answer, and the decision on which tool to use should be made on a case by case basis. This means it usually makes sense to get expert advice.

As a rule, if the translation scope is fairly large and translations need to be updated and maintained after the initial translation, SE63 is the best option.

With that in mind, let's take a look at a few sample scenarios.

For large projects where the user interface of transactions and reports need to be translated, SE63 is usually the best option, since that is what it was made for and where it's strengths lie.

If you only need to translate a few customizing tables into one language and further translation is not planned, it might make sense to export the texts for translation, since SE63 does not offer much context information for customizing tables anyway, and you would not be taking advantage of most of its features.
If, in the same scenario, you need to translate several tables into one or more languages, or you’re even planning to translate the user interface at a later date, it may make sense to take a closer look at SE63, since scaling and project management will be much easier, and you will be able to easily reuse texts created during the initial translation.

If SAPscript forms and Smart Forms need to be translated, they cannot be exported using LXE_MASTER, so externalizing does not help here. However, Adobe Forms can be exported.

Another common scenario where it helps to externalize texts, is when a single large table needs to be processed simultaneously by two or more translators, due to time constraints. This is not possible in SE63. However, if the table is exported, the resulting file can be split up between translators.

If security concerns make it impossible to allow external translators access to SAP systems, externalization can be the only option if the translation cannot be performed by internal colleagues.
Chapter 5

SE63: Main Characteristics
SE63 was developed to translate ABAP-based texts, that is user interface texts as well as customizing tables, forms etc. It is a very powerful and feature-rich tool. But it’s also true that the translation approach using SE63 requires training and experience for translators and project managers to use it correctly.

SE63 is actually just one of the many set of transactions that form SAP’s translation environment. Maybe the most important of these transactions is LXE_MASTER, where a large part of the functionality resides that we often think of, as SE63 features. The export functionality shown earlier is only a small part of LXE_MASTER, which is mainly intended for project managers and consultants.

The other main transactions used by translators are SLLS, the translation statistics, and SLPP for proposal pool maintenance.

SE63 may be widely regarded as complex, but with the proper expertise, it can do far more than any SAP externalization tool, including cost-saving and quality assurance features, that make it the go-to solution for most SAP translation projects in an ABAP environment.
This chapter offers an overview of the main features of the SE63 translation environment.

A summary is listed in this slide. Detailed information on each feature is available in the next slides.

If you want to know more about these features, please click on the relevant topic.
Not all text types are translated in the same editor in transaction SE63.

The majority of translatable texts in an ABAP-based SAP system are short texts, which are translated in the short text editor. Many of the most powerful features of SE63 described in this chapter are only available for short texts, such as proposal pool and automatic distribution. In most SAP translation projects, short texts make up the largest part.

The most well-known long text object types are F1 help texts, which are translated in the long text editor. In this editor, the proposal pool is not available, and long texts cannot be exported using transaction LXE_MASTER.

The same restrictions apply to SAPscript forms, which are translated in their own editor. Smart Forms and Adobe forms are translated in the long text editor.

There are also some text types that cannot be translated in SE63 at all, but have to be translated using a separate editing environment, such as SAPscript standard texts created in transaction SO10.
One of the key advantages of SE63 is the fact that the translators are logged on to the SAP system while working and have the necessary roles to access developer transactions. Provided, they have been granted the necessary authorizations. Translators wanting to translate a specific text on the user interface will frequently require context information in order to be able to enter a correct translation. This enables them to make the correct choice in case of ambiguous source texts such as the German text “Anlage”, which can be translated to English as “Asset” or “Attachment”. These kinds of source texts are really common.

SE63 offers quite a bit of context information. For some object types, such as Screen Painter texts, SE63 even provides a preview feature that enables the translator to display the translations as an end user would see them. And for most other object types, an experienced translator can look up context information using developer transactions. For example, when translating the texts of a data element, they can look up the tables in which this data element is used and find out which texts are used in the vicinity of the data element’s texts on the user interface.

This goes a long way towards avoiding translation mistakes, like the one depicted in the screenshot.
Another key feature of SE63 is the way existing translations for short texts can be reused. For each source text that comes up for translation, SE63 will check if an identical text has been translated before. If that is the case AND if the proposal pool has been maintained for this translation, it will propose the translation that was entered the last time. So, the translator can reuse it for the new source text, by simply double-clicking it. This not only saves time, but also improves translation consistency.

The proposal pool functionality is somewhat similar to what the translation industry calls a translation memory, but has a number of differentiating characteristics that promote translation quality.

Firstly, it links each translation in an individual object to its matching proposal in the proposal pool. This means that if the proposal is deleted or changed so it no longer matches the translation, the text loses the Translated status and will come up for translation again. This is very helpful when making changes or corrections to the translations across an entire SAP system, and it promotes consistent use of terminology.

Secondly, it only allows exact and case-sensitive matches. When translating user interface texts that frequently only consist of a single word, it is very useful to only be offered exact matches instead of large numbers of “fuzzy” matches.
Finally, the proposal pool also supports definition of proposals that are specific to a terminology area such as FI or MM. As such, the right proposal is offered in the right context.

It is also possible to create abbreviations, and you can assign one of four quality statuses to mark a translation as the only valid option or as one of several possible translations for a source text.

The proposal pool is updated live so each translator always has immediate access to their colleagues’ latest translations. This built-in feature is similar in functionality to a translation memory server, which many CAT tools only offer as a very expensive add-on option.

These features make the proposal pool better suited for SAP translation in ABAP-based environments compared to other CAT tools, both for translators as well as for project managers and consultants.
SE63 takes translation re-use a step further with Automatic Distribution, a feature which allows you to translate duplicate source texts automatically. As a first step, this feature collects duplicate texts in the part of the system that you specify. More precisely, in an object list or worklist. You can also define what is considered a duplicate text, by entering the minimum number of times the text has to occur in order to be processed. These so-called “top texts” are collected in “virtual translation objects” in transaction SE63.

In a second step, the top texts are pre-translated by a translator, if they can be safely distributed. Ambiguous source texts that could be translated differently in different contexts, should be skipped, as distribution could lead to translation mistakes.

Finally, the created proposals are distributed automatically into all the places where the associated source texts occur in the relevant part of the SAP system. This means that thousands of texts do not have to be translated manually.

In the example you can see that after distribution, more than 7700 lines from 18 800, which is 41% of the total volume, have been translated automatically. This not only saves time and costs, but also improves terminology consistency.
Another of SE63’s strength, is its ability to mark previously translated texts whose source texts have changed as „Modified“ so translators can update their translations to fit the new source texts. This only works if the proposal pool has been maintained.

This feature comes into play when, for example, after an SAP translation project is completed, since there are always still texts being added or changed in development or customization. Also, when a source text is changed, its translations need to be updated as well to reflect the meaning of the new source text. Failing to update a translation means that users logged on, in any but the original language, see an outdated text on the user interface.

In this example, a German button text named “Sichern” has been correctly translated as “Save”. After the translation is completed, the source text is then changed to “Löschen“, which translates as “Delete“. If the translation is not updated, the button will still say “Save“ on the English user interface.

In SE63, the status of the English source text will change to “Modified“ when the original German text is changed, which will be visible in the translators’ worklists as well as in the translation statistics.
And finally, here are a few of the project management and quality assurance features that SE63 offers.

In transaction SLLS, you can call up translation statistics that detail the number of SAP lines in your translation scope and keep you updated on the progress translators are making.

The assignment of packages to translators made in transaction LXE_MASTER can be optimized to ensure that translators only work on certain packages. For example, restriction to a specific SAP module, which in turn, helps to promote translation quality. Translators can also be instructed to make more specific selections when calling up a worklist, which makes it possible to have translators work only on specific objects or object types.

LXE_MASTER also offers translator profiles, which are used to restrict translators’ access to functionality in transactions SE63, LXE_MASTER, and SLLS. It is, for example, possible to assign a profile tailored to a junior translator or to a terminologist who does not need to actually translate anything but needs access to all the texts in a project's overall worklist. These restrictions are applied on top of traditional SAP roles.

Project managers are also provided with the functionality to manage the worklists of the translators working for them.
As for quality assurance, when you need to review translations which have been created or changed by specific translators within a certain timeframe, virtual objects can be created containing these translations. There is also extensive functionality to search the proposal pool for texts or metadata in order to analyze the contents of the proposal pool or to perform proposal pool cleanups.

As stated on the slide about the proposal pool, it is also very easy to correct translations or terminology system-wide thanks to the proposal pool concept.

Text searches are not only possible within the individual translator's worklists, but also across an entire object list. This could theoretically enable searching the entire system. Searching across an object list does not happen live, but works by scheduling a fairly resource-intensive background job for each search. It is not intended for use by individual translators, but it can come in very handy when implementing corrections. Both these features only work for short texts.

There are also a number of features for reusing translations available. These which will be described in Part 3 of this E-book.
Chapter 6

What to Consider for Import or Export into other Tools
In chapter 4, “Which translation tools to use”, we listed the pros and cons of externalizing the translation content.

In this chapter we will give an overview of the different aspects to be considered when using the export or import functionality of the SAP externalization tool or third party externalization tools. In the next slides we will concentrate on the questions which should be answered when you consider choosing the external translation scenario.
When you decide to translate the system content outside of the SAP system, you have to decide which tool you will use for translation. Basically there are two options: you can use Excel or a professional translation tool.

Small amount of texts can be translated with Excel. The advantage of Excel is that it is typically already available in almost all companies and the users are familiar with the program. However, you should always take into account that, in general, Excel is not designed for translation or even text editing. It does not support group work and has no built-in quality check features. The risk of accidental errors is higher. Some of the typical problems will be shown in the next slides.

XLIFF is a standard exchange format designed for the translation of localization content such as program strings. Computer Aided Translation or CAT tools are designed for professional translators. They use a central translation database (a Translation Memory) during the translation process, supporting group work so that several translators can work on the same content in parallel. Translations from previous projects can be re-used, which results in decreased translation costs. CAT tools also have built-in quality assurance features which support both linguistic and technical translation quality.

If the translation volume is larger than a few hundred strings, and if you would like to choose a long-term solution, we recommend you use a CAT tool for the translation of externalized system content.
In computing, a character encoding is used to represent a repertoire of characters by some kind of an encoding system.

UTF-8 is a character encoding capable of encoding all possible characters, or code points, defined by Unicode. Mixing different encodings during import into the system may lead to corrupted characters which are not displayed properly.

Nevertheless, if you choose Excel or XLIFF as a format for externalization, it is important to be careful when choosing the right encoding for your file. You can check the encoding of a file with tools like Notepad++, which is a free editor running under the MS Windows environment, where you have a menu option to display the encoding and to convert the file into different code pages.

When working with Excel, you should also watch out for special formatting characters used for mathematical calculations. For example, = equal, + plus, - minus, “ etc. and ensure that they are not used as a part of an Excel formula, but as texts.
Chapter 6 - Technical Issues

Maximum Length

- Always keep the maximum string length

Strings may have a different maximum length in the system, between 1 and 255 characters. Even if the import tool takes care of the maximum length, it is essential not to exceed the maximum string length during translation. Otherwise, translations will be cut off randomly at 255 characters. This can result in additional effort for correction cycles.
Handling multiple lines (that is, lines belonging together within one object) is a challenge even in the SE63 editor. Such lines typically appear in large tables or ABAP programs. You can see two examples of multiple lines in the slide.

On the screenshot on the left, a list output appears in different strings which will be displayed together on the user interface.

On the screenshot on the right you can see sentences split in two strings. Depending on the externalization tool you are using, and how you are downloading the content, you may lose contextual information which could help translators to identify such multiple lines. This is one reason why it is recommended to use SE63 for translation.
Chapter 7

Non-SAP Tools
Chapter 7 - Disclaimer

- Information on third-party tools in this chapter is information that is publicly available.
- The list is not comprehensive and other tools do exist. SAP can only offer comprehensive information for its own solutions and functionality.
- This chapter contains no explicit recommendations or discouragement to use any particular tool.
- However, a general decision criteria for the tool of choice is offered in the section on tool sources and tool characteristics.

⚠️ SAP does not offer support for non-SAP translation tools including content created by non-SAP tools and imported into SAP systems!

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- This chapter contains no explicit recommendations or discouragement to use any particular tool.
- However, a general decision criteria for the tool of choice is offered in the section on tool sources and tool characteristics.
- A word of warning: SAP does not offer support for non-SAP translation tools or for content created in non-SAP tools and then imported into SAP systems!
This slide lists a selection of translation tool types. There are several tools available on the market. Some explicitly target SAP translation, or specific types of SAP-related texts, like master data or customizing data.

Other tools mainly offer functionality for re-use of previously created translations from the SAP SE63 translation environment, or aim at externalization of SAP content.

Apart from SAP specific tools, there are generic translation tools. The so called CAT or computer-aided translation tools which are widely used in the translation and localization industry. These may be of interest to companies who have their own internal translation department.

The free online translation services are a topic in itself. We will go into more detail in one of the upcoming slides.
In this slide, we list some generic characteristics of translation tools to watch out for, if you are considering either investing in a tool yourself, or you are considering outsourcing translation to a partner, where the tool offering is the main decision factor.

- Re-use is a must-have for any tool, since this increases consistency and is also an important factor in cost reduction of translation projects.
- Another important feature for large projects is real-time sharing of created translations so as to get maximum leverage of translation efforts.
- From a cost perspective, it can be good to compare the licensing and upgrading conditions.
This slide shows functionality of translation tools, specifically important, when translating SAP user interface texts or SAP content.

The context information is very important for SAP user interface translation, since terms can have different meanings in different contexts.

A very important point is also how the import of external texts is done into the SAP system tables. If SAP tables are actually modified on a functional level, this may have consequences for the SAP support, which is only available for tables with originally delivered functionality.

For large volumes, obviously a good volume management and status tracking functionality is a must.

Equally, the ability to distribute volumes over multiple translators, in a logical way, and based on functional areas is very important. Distribution only at a main component level, like Basis, LO, FI, CO etc. may not be detailed enough. Even within those areas, terms may have different meanings depending on specific context and sub component.

Finally, for future use in maintenance, a good versioning functionality is a very important feature.
There are many tools on the market from many different sources.

Developing tools for SAP user interface translation is not restricted, and any company wishing to do so can develop this functionality and offer it on the market. Also without having to inform SAP or without having any contact with SAP.

Whereas SAP cannot recommend specific tools, or discourage the use of certain tools, from a translation expert perspective, the order in which sources are listed in this slide would be our suggestion for the order of places to look for non-SAP translation tools.

The factor to look out for is the level of contact with SAP the companies offering those services have. In general, the higher the level of contact with SAP, especially on translation topics, the better positioned a company will be, to offer high-quality SAP translation tools.

But having said this and without an in-depth analysis of the actual tools, it is difficult to deliver general comments on tool quality. Therefore, this list is only a generic guidance, no more.
Free online translation services are a reality which cannot be ignored in the translation world. Our language service partners frequently get asked: “Why use human translators at all?” “Can’t we just run everything through an online Internet translation service?”

For some types of texts or use cases, this may indeed be an option.

However, when looking at the characteristics of good translation tools, as we have seen in the previous slides, you will find that the free online translation tools do not fulfill these requirements.

Online translation tools can be used for:

- One-time use, for small volumes
- Where the target group is one person or a very limited group of people
- The content translated is for internal use and not for external publication
- If you want to just have a global idea and a gist of the original meaning of a text and high-quality is not required

Finally, data security should be considered. Any texts you submit via the Internet for translation are generally not protected.

For any other cases, other than the ones listed on the right, we strongly recommend you use a proper computer-aided translation tool with human translators. Especially for user interface translation, the chance of errors being introduced and multiplied numerous times in the translation can be very high.

So you need to be careful in using free online translation services.
The list on this page and the next slides includes tools for SAP specific content only.

For generic translation tool information, we recommend that you either consult with internal translation resources, or discuss the best option with an external translation partner.

The list may not be comprehensive, and there may be other tools on the market not included. Only companies with an established relationship with SAP are mentioned. The actual tools themselves, have not been tested and evaluated by SAP internally, since we only use our own tool landscape.
## Chapter 7 - List of Partner Tools for SAP specific Translation – II

<table>
<thead>
<tr>
<th>Type / Usage</th>
<th>Tool Name</th>
<th>Company</th>
<th>SAP Relation</th>
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<tr>
<td>Re-Use of SE63 translation memory content</td>
<td>Translation Memory Builder</td>
<td>MorphoLogic Translations</td>
<td>SAP Language Service Partner</td>
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<tr>
<td>Re-Use of SE63 translation memory content – modified translations</td>
<td>Workflow Proposal Machine (WPM)</td>
<td>Workflow</td>
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<tr>
<td>Translation of Customizing data</td>
<td>Customizing Translation Accelerator</td>
<td>Lucy Software</td>
<td>SAP Language Service Partner</td>
</tr>
<tr>
<td>Translation of Customizing data</td>
<td>Workflow Customizing Optimizer</td>
<td>Workflow</td>
<td>SAP Language Service Partner</td>
</tr>
</tbody>
</table>
This page also contains information on the “Translation Manager” offered by SAP Deutschland. It is listed here since it’s not part of the standard translation tool delivery, and is offered as a stand-alone consultancy service against a separate fee.

Product texts can be contained in material masters, material classes, catalogs, etc. The texts can either be translated in the SAP ERP environment, or extracted for translation with a translation tool.

More information can be obtained from the responsible SAP team via the given mail address.
Summary - “Introduction to SAP Translation – Part 2”

This is the end of Part 2, Organization and Tools. We covered the following topics:

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1</td>
<td>Introduction: Purpose and Structure of the E-Book in 3 Parts</td>
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<td>2</td>
<td>Important planning aspects to consider for translation</td>
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<td>3</td>
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<td>4</td>
<td>Which translation tools to use? (SAP SE63 or…)</td>
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<td>6</td>
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<td>7</td>
<td>Non-SAP tools</td>
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<tr>
<td>Appendix</td>
<td>Where to find useful information on translation</td>
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</table>

You can now check the Appendix for more information, or continue with one of the next two parts of this E-book:

- Part 1 – Decision Making, Strategy and Scoping
- Part 3 – Translation Execution, Maintenance and Resources
Appendix

Where to Find Useful Information on Translation
Appendix content

- Key Terms in this E-book
- Notes on Translation
- SAP Help Portal
- SAP Language Service Partners
- Training
- Support Portal SAP Language Services
- Contacts
Glossary of Terms around SAP translation

- The next slide lists a number of important and frequently used terms and concepts around SAP translation. An explanation of these terms can be displayed via the online SAP terminology platform SAPTERM.COM

- Call up http://sapterm.com/ by clicking the link

- Choose Look up SAP terminology

- Make sure you’re searching from English

- Enter the search term in the Search For field

- Choose Search

- If more than one entry is now listed, find the entry that’s assigned to BC-DOC-TTL.

- In the Definition column, click on the first line of the definition. The entire glossary definition is now displayed in the Definition window.
### Key Terms in this E-Book: Lookup the Definitions in sapterm.com

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<th>Abbreviation</th>
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<td>Automatic distribution</td>
<td>Meta object type</td>
<td>Short text editor</td>
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<td>Best proposal</td>
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<td>Collection</td>
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<td>Domain</td>
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<td>Domain standard</td>
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<td>Exception</td>
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<td>Externalization</td>
<td>Other object</td>
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<tr>
<td>Long text editor</td>
<td>Proposal pool</td>
<td>Top text</td>
<td></td>
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</tr>
</tbody>
</table>
SAP Notes on Translation and Globalization

SAP Notes can be accessed via [https://support.sap.com/notes](https://support.sap.com/notes)

The notes below contain important additional information on globalization and translation topics, and also include links to other documentation and information sources. Notes about translation tools and processes are assigned to component BC-DOC-TTL.

<table>
<thead>
<tr>
<th>Note</th>
<th>Topic</th>
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<tbody>
<tr>
<td>1375438</td>
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<td>1714956</td>
<td>Using SAP translation tools for ABAP developments</td>
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<td>195442</td>
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<td>330104</td>
<td>Transport requests used for language delivery – also contains language availability data</td>
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<td>1156507</td>
<td>Language supplementation, RSREFILL and client maintenance</td>
</tr>
<tr>
<td>485741</td>
<td>Handling customer translations in the upgrade</td>
</tr>
</tbody>
</table>
SAP Help Portal

The SAP Help Portal can be accessed via http://help.sap.com

Setting Up and Coordinating Translation

Translation Tools for Translators

Click the links above, or navigate to the component “BC-DOC-TTL” on ABAP translation tools in the SAP Help Portal as described on the right.

Please note that this information applies to NetWeaver 7.5 and is the most recent information. For earlier NetWeaver versions, please go to the relevant release.

Navigation:

2. Choose Technology Platform → SAP NetWeaver → SAP NetWeaver 7.5.
3. Scroll down to Application Help, and open the Function-Oriented View.
4. On the left side of the screen, expand Application Server → Application Server ABAP.
5. Choose Other Services.
6. Expand Services for Information Developers and Translators.
7. Choose Translation Tools for Translators or Setting Up and Coordinating Translation.
Finding SAP Language Service Partners: New SAP Language Services Portal

https://translation.sap.com/

SAP Language Services Portal:
- Information from SAP Language Services for SAP translation suppliers (only accessible for suppliers)
- Information from SAP Language Services to SAP customers/partners on translation/partner topics:
  - Generic SAP Language Service Partner Info
  - Partner list -> recommended resource to find partners
  - Partner Success Stories
  - This E-Book

Customer-facing section

* Available from mid-June 2016
SAP Language Service Partners in Partner Finder & SAP Store

Via the SAP Partner Finder (all)  
Via SAP Store (only partners registered in SAP Store)

Want to apply to become a language service partner? Click here

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Training

SAP offers the 3-day training course ADM340 “Setting up Customer Translation Projects”

Focus/goals:
- Understanding the translation workflow from beginning to end
- Scoping/system analysis
- Defining Translation Strategy
- Setting up systems for translation projects
- Configuring of translation environment

Target group: project leads/administrators/coordinators (not for translators wanting to learn to translate in SE63)

Details via this link or: search via http://training.sap.com. Please note: change the country setting to Germany in order to find this course!!!

Location: Germany only

Frequency: 2-3 sessions per year
Contacts

Generic information on globalization topics: globalization@sap.com
Generic information on translation topics: partnerwithsls@sap.com
Information on language service partner topics: gerdien.meijering@sap.com

Suggestions for other follow-on E-Books: gerdien.meijering@sap.com