Assessment: Translation Technology

Contents

0. Introduction

For the purposes of this assessment, I was tasked with creating a Term Base (TB), importing the TB into a Computer Assisted Translation Tool (CATT), and translating a press-release from German to English. Additionally, part of the translation was to be conducted with a Machine Translation (MT) tool, and for that MT output to be evaluated and post-edited. Finally, the translation was to be assessed using quality control techniques, before being finalised and exported.

   The following sections are laid out to reflect the requirements of this assessment. Section 1 addresses how the TB and Translation Memory (TM) were created, Section 2 addresses how the project was carried out and contains a discussion of Machine Translation and Section 3 addresses finalising steps and quality control measures. The appendix is located in Section 5, and houses the Source Text (ST), Target Text (TT), and the Target Unit (TU) view of both, as well as Figures 1-4 for the Machine Translation Evaluation.

   The source text, otherwise referred to as the "assessment article", is a press-release regarding a green start-up that was presented by the Berlin-Brandenburg video games industry at the national games trade show "gamescom", published on 8th August 2022 by the Berlin Senate Department for Economics, Energy and Public Enterprises on their website: <https://berlin.de> (Section 6.1). The article includes formatting such as bold, bullet points and hyperlinks, and has a total of 654 words.

1. Setting Up the Project

In order to become accustomed to the chosen tools for translating the assessment article, and in order to aid in the creation of a Term Base and a Translation Memory, 5 press-releases regarding the video game industry in Germany were selected and translated, their segments uploaded into the main TM. Additionally, 2 prior projects, also with the same focus, were uploaded to the TM using an alignment tool. These 7 articles have been highlighted in Section 6.2. More details on this process and the software used will be discussed forthwith.

1.1. Software

The software chosen for this project was SDL Trados Studio 2022, as it is not only a market leader for producing CATTs, but also, according to the translator community, offers one of the most comprehensive CATTs in the industry (Laglaive, 2022) (Jones, 2023). As 1/3 of translators are used to 2/3 of jobs being with TM software of the client's choosing (Schneider et al., 2018, p.742), it is highly likely that clients or agencies will require the use of Trados or other market leaders such as Phrase and Déjà Vu over the course of a translator's career. Trados in particular was chosen because it offers an offline experience and provides better security than a fully online service. This can be useful for commissions where data protection is paramount or non-disclosure agreements (NDAs) require files to be stored locally rather than on a server.

1.2. Term Bases

As the software for this project was Trados Studio 2022, the TB software chosen was the accompanying MultiTerm 2022, which allowed terms to be added directly from the target units (TUs) of the 7 pre-assessment articles, as well as translated and edited within the Studio tool. I chose to create a sector-orientated TB covering the whole video game industry rather than a client or project specific one, so that I could separate fields of work without juggling multiple TBs. During creation, I chose several additional fields along with MultiTerm's defaults, such as 'acronym', 'gender', 'end-user', 'client', and 'copyright', to account for both language and context specific elements.

For example, the gender of German words can sometimes affect meaning, such as the noun 'See' which means 'lake' or 'sea' depending on whether it is masculine or feminine. 'Copyright' on the other hand is context-orientated, as many games create proprietary terms or refer to intellectual property within the domain of pop-culture, and it is beneficial to be cognisant of this in order to avoid legal repercussions. During the completion of the project however, I found that the 'end-user' and 'client' fields were un-used, and any pertinent contextual information was carried across in the 'definition' and 'note' fields.

This approach lends itself to an ad-hoc, minimalist terminology management style, which is, as Bowker (2015, p.311) mentions, typical among freelance translators due to its efficiency and low time consumption. Clients and agencies however might take a different approach, building their own Term Banks, which tend to be more structured and use stricter, more controlled sources. This aids in standardisation, and controlled translation management helps companies better communicate their brand and avoid legal liability. In this case, I was not specifically asked to create a TB for a client, and so used the function to store terminology research, idiomatic phrases, and the translations of German proper nouns, such as those of the German federal ministries (see Fig.5 below).

Figure 5, term entry in SDL MultiTerm, 2022

Entry number: 18

🇩🇪 **German**

Definition: Laut der deutschen Regierung gibt es ab 8. Dezember 2021 15 Bundesministerien und nur eines davon ist ein Bundersministerium für die Handlung von wirtschaftlichen Problemen und so heißt es das Bundesministerium für Wirtschaft und Klimaschutz, was in vergangenen Jahren auch für Wirtschaft und Technologie und Wirtschaft und Energie verantwortlich war. Das Ministerium ist mit der Gamesbranche verwickelt und nimmt an verschiedenen Events teil.

Note: protokoll-inland.de

Bundeswirtschaftsministerium
Gender: das

Bundesministerium für Wirtschaft und Klimaschutz
Gender: das
Acronym: BMWK

BMWK
Acronym: Bundesministerium für Wirtschaft und Klimaschutz

🇬🇧 **English**

Federal Ministry for Economic Affairs and Climate Action
Source: bmwk.de
Status: preferred

Federal Ministry of Economy
Source: linguee
Status: deprecated

"Definition: According to the German government, following 8th December 2021, there are 15 Federal Ministries and only one is responsible for the handling of economic issues and it's thus called the Ministry for Economic Affairs and Climate Action, which in previous years has been responsible for Economic Affairs and Technology and Economic Affairs and Energy. The Ministry is involved with the games industry and takes part in various events.

This system works well as it does not require much time to implement, however there may be issues when exporting a TB for use with different software, as different applications have different constraints on what fields can be included. For example, Memsource (now "Phrase") uses less fields than Trados and exports to an .xlsm file type (such as used by Microsoft Excel), using a particular structure (such as codes for languages in the headings) that is not reflected by Trados, which exports to a different file type, .xlm. Third-party glossary conversion software may be the best solution for cleanly exporting a TB from Trados Multiterm to other software, should that be required by an employer in future, although one will have to keep in mind that some information (such as additional fields like 'copyright') may not show up in the output.

2. Completing the Project

After aligning the 2 previous project articles, and translating 5 additional articles within Trados, I began the assessment translation with 276 segments in the TM (almost 4000 words) and 26 terms in the TB.

Analysis and pre-translation reports of the assessment article showed that there was one repeated segment and one 100% match which were then pre-translated, and two 50-74% matches (these all concerned the press contact information, including email address, phone numbers, and links). I did not edit Trados' default match criteria, although in a project with more documents and more repeated segments, I would edit the criteria and allow for more fuzzy matches to be pre-translated, as I would be surer of their content.

2.1. Using Trados

Despite, in my experience, Phrase having a more intuitive and streamlined interface compared to Trados Studio 2022, I ultimately enjoyed working with the programme once I had gotten accustomed to it, and most bugs happened while I was experimenting and building the TM (a bilingual review failed to import properly; my main TM wasn't updating as I expected it to) but by the time I reached the assessment article, I had learned what settings to look out for and how to create a working system.

The only mentionable issue I encountered while translating the article on Berlin-Brandenburg at gamescom was with hyperlink tags in TUs 16a and 16b, which I eventually discovered had been my own error, rather than the software's. When I exported the translation into the target text, one of the hyperlinks didn't work and needed repairing. What happened was that I had mistakenly combined segments 16 (the hyperlink) and 17 (screen tip) and then, on realising that the original separation was intentional, had separated them again. Unbeknownst to me, Trados however kept the segments linked (through the a-b lettering system), so when the document exported, the hyperlink and screen tip were combined, thus breaking the link. I learned from the experience to pay attention to the segment codes on the right-hand side of the viewer in Trados Studio which lets me know whether a segment is main text, a hyperlink, or metadata, etc. Additionally, with appropriate quality control checks, such mistakes can be caught and rectified (as discussed in Section 3.1).

2.2. Machine Translation

After I had completed the initial human translation, I moved onto experimenting with machine translation. I did not feel comfortable translating the entire text using MT tools, as I am, through my language studies, used to avoiding such software. For the purposes of the assessment however, 6 segments were chosen in order to test MT output for video game industry press-releases. The first 3 segments (TUs 8-10) were chosen for their length and inclusion of proper nouns, and the latter 3 segments (TUs 20-22) were conversely chosen for their conciseness.

I opted to use the application DeepL as it allowed one to use it without first creating an account or opting for a free trial. DeepL does however, in its paid service, allow for integration with CATTs and has stricter data protection, so should it be necessary in future to use the software more regularly as part of a tool-suite, DeepL would be a strong contender next to other programmes such as Google and Systran Translators (Merve, 2023). Not only that, but DeepL is produced by a German company based in Cologne and excels in the translation of German (Wyndham, 2021).

DeepL uses Neural Machine Translation (NMT) and relies on the corpora of parallel texts available via its parent, Linguee. As NMT software, it excels in creating fluent translations while possibly lacking in semantic transfer compared to more traditional Phrase or Word Based Statistical Machine Translation (P/WBSMT) (Nunes Vieira, 2019, p.325). I therefore expected this to be reflected in the MT Evaluation (see Figures 1-4 in Section 5.4) – the type of errors encountered are discussed in Section 2.3.

For the evaluation, I chose several differing evaluation types in order to compare them. Two sets of tests were conducted: Monolingual using Chunya's (2014, p.222) Intelligibility and Fidelity scales, and bilingual, using Moorkens' (2018, p.380) and Trujillo's (1999, pp.259-260) Adequacy and Accuracy scales, with an accompanying error analysis, augmented in this case from the example in Chunya's (2014, p.223) work into a 'challenge analysis' to better fit the type of errors observed. I also reversed Trujillo's Accuracy scale so that it matched the other tests, where a higher score is more positive. Indeed, I found Trujillo's Accuracy scale to be the most useful due to its strict criteria, whereas the other scales led to quicker but less confident scoring by myself.

The results of the tests, compiled into Figures 3(a-b) and 4(a-d) in Section 5.4 are mixed. Unfortunately, the sample and participant sizes mean that no statistically significant conclusions can be made, although the exercise itself was not without merit. The monolingual/intrinsic (language quality focussed) tests were of little use, although perhaps the overall high scores agreed that the translations were passable. This was because after the initial (under 30 second) scores, I realised that the interpretation of what fidelity and intelligibility referred to (as both components of the concept of comprehension) was for these tests ambiguous and I ended up changing the scores several times during the other tests.

The bilingual/extrinsic (meaning focussed) tests on the other hand could make an argument that DeepL's NMT works better with shorter sentences – indeed, Forcada (2017, p.305) points out that NMT typically performs better under 30 words: For example, segment 10 had the lowest adequacy/accuracy scores and the second highest word count of 36 words.

Ultimately, the results are subjective and inconclusive. Therefore, to repeat the test in future, I would include a larger sample size and recruit more, truer blind observers to score the machine-translated segments. I would also change the scales to be equal in size and

have a stricter set of guidelines for their use in order to guide the participants and ensure the results have a firmer foundation to be compared upon.

2.3. Post Editing

Along with the evaluation scales I included a 'challenge analysis', highlighting in Figure 3b areas that would need editing and attempting in Figures 4c and 4d to count and categorise the types of challenges. I noticed quickly that the changes I desired referred to semantic transfer – lexical and syntactic ambiguity and mismatches, where the words/phrases and their use were not quite 'native'. However, what counts as 'native' is often subjective, as Koponen (2016, p.140) notes, which is why human evaluation of machine translation is not a particularly reliable method, although necessary in this case as the experiment was context-based rather than a fabricated set of segments for use in a test-suite.

Depraetere et al. (2014, p.100) adds to this, stating that post-editing methods are even more subjective than evaluation methods: for my post-editing process, I chose to do a full, bilingual post-edit. I focussed on the areas already highlighted in Figure 3b, and the post-edited segments can be seen in Figure 2. As this is a hypothetical situation with plenty of time allotted and I am capable of doing a bilingual review, I chose to do as full a post-edit as possible. Additionally, as press-releases can impart important information and news to both users, partners, and competitors, one would hope that clients would typically opt for this option.

Reality does not always meet the ideal however, as shown perhaps by medianet's English article on gamescom (medianet berlinbrandenburg e.V, 2022). The article displays language choices similar to DeepL's translation of the segments in Section 5.4: Some German structures remained for example, and there were several misuses of the word "appearance" where the German "Auftritt" requires a one-to-many solution, and different synonyms such as "exhibit" and "presence" would have been preferable in some sections. If this is the case, I would guess that a light post-editing process was chosen, as while it reads comprehensibly and accurately, semantic errors in terminology and its use can be observed.

3. Finalising the Project

Following the post-editing process, I did make some slight adjustments to segments 20-22 (highlighted in Section 5.1), reflecting DeepL's contribution. The final steps of the project after this were to use quality control measures to check the translation before exporting the target text document. As the translator is often expected to be responsible for quality control (QC) measures, this was a requirement of the assessment. I have also included a discussion on hypothetical quality assessment (QA) measures as, although not required, they are often carried out by agencies and clients, especially with novice translators such as myself.

3.1. Quality Control (QC)

The first step of the quality control process was to complete a bilingual review, which can be seen with tracked corrections in Section 5.1. I used Microsoft Word for this, relying on its spelling and grammar check functions, addressing each item either by amending or ignoring the suggestions as I judged appropriate. The largest change I made was to the dating

conventions, switching them from a faux-American standard to a proper British one. I then did a manual check of dates, names, and figures, before reimporting the document back into Trados and having the segments with tracked changes show up as 'not translated'. I then went through and accepted the changes, reviewing each one as I did. For added measure, I conducted Trados' quality assurance batch task, which alerted me to where I had added extra spaces at the ends of segments (I discovered this was a nervous habit at the end of finishing a sentence where I would reflexively press the space bar). I also had the quality assurance task check for terms, repetitions, and inconsistencies with dates and numbers, of which there was one repetition I had missed.

Finally, I exported the document into the target text (viewable in [Section 5.3](#)) and did a final read through, also checking formatting compared to the source text ([Section 5.2](#)). There were some inconsistencies with font caused, I believe, from copying across hyperlink tags. I also found that I had suffered slightly from the "peephole effect" (Heyn 1988, cited in Melby and Wright, 2014, p.671), and that reading the text as a whole piece helped me focus on fluidity, making minor changes to wording. Following that, I saved the document.

3.2. Quality Assessment (QA)

The next step here, before the project would be sent to a client, would most likely be to have the text reviewed using quality assessment methods such as those listed in the LISA QA Metrics (Trados, 2011), which looks at language and formatting. It is possible that an extended level of QA would be used because I am a novice translator, and the scores and comments provided will be beneficial to my professional development and to make sure that I am keeping in line with the standard that the agency/client expects. In an ideal world, full linguistic QA checks (Matis, 2011, p.147) would be standard, so that 'fresh eyes' can look over the finished product and ensure that it is as accurate as possible, although this may be more realistic in legal and technical contexts where mistakes can have real and damaging consequences. For periodical articles such as press-releases, time and money may dictate that such standards are not held to, preferring a lighter, End-User Linguistic QA (ibid., pp.151-152).

4. Concluding Thoughts

In this project, I used Trados Studio 2022 to first create a TM and TB through the translation and alignment of 7 other video game industry press-releases, before translating the assessment article. I then used the application to translate, review, and quality control the text, also using some post-edited machine translation, which was conducted on a sample of the text using the web-version of the application DeepL and then evaluated. After this, the assessment article was exported to the target text document and final quality control checks were performed. The sections above discuss this process, some issues, as well as a reflection on the programmes and my use of them.

Despite the rather strict learning curve for using Trados Studio as a CATT, I ultimately enjoyed the exercise and would use the software again, as I find its portability, customisability, and design simplicity to be appealing. I also felt my translation process to be more efficient once I had learned how to use the software properly. In future, an additional test such as those in the TAUS DQF test-suite (Panić, 2020), which includes typing- and

eye-tracking, could be used to see if the software truly does make any marked, quantifiable difference.

Word count: 2992

5. Appendix

5.1. Target Units from Bilingual Review

	Source segment	Target segment
1	Innovative Berlin-Brandenburger Games-Szene reist mit grünem Startup zur gamescom nach Köln	The Innovative Berlin-Brandenburg Gaming Scene Travels to Cologne to host Green Start-up at Gamescom
2	Pressemitteilung vom 08.08.2022	Press release from 8th August 2022
3	Einladung zum Empfang beim medianet-Gemeinschaftsauftritt am 24. August	Invitation to the reception of medianet's joint Berlin-Brandenburg exhibition on ~~the~~ 24th August
4	Es ist wieder so weit:	It's that time of year again:
5	Die gamescom, das weltweit größte Event rund um Computer- und Videospiele und Europas führende Games-Business-Plattform, öffnet vom 24. bis 28. August 2022 ihre Tore.	Gamescom, the largest event worldwide centred on computer and video games and Europe's leading gaming-business platform, opens its doors on ~~the~~ 24th August 2022 and shuts them again on the 28th.
6	Dass es hierfür bereits zum neunten Mal einen Gemeinschaftsauftritt für Berlin und Brandenburg gibt, der vom *<14>*medianet berlinbrandenburg e.V.*</14>* organisiert und von der *<20>*Senatsverwaltung für Wirtschaft, Energie und Betriebe*</20>* sowie vom *<26>*Medienboard Berlin-Brandenburg*</26>* gefördert wird, wird von den beteiligten Unternehmen mit Begeisterung angenommen.	This is the 9th time that Berlin and Brandenburg will appear together at gamescom, and the various companies involved have taken to their roles with excitement. The Berlin-Brandenburg exhibition is organised by *<Bold>*medianet berlinbrandenburg e.V.*</Bold>* and sponsored by *<Bold>*Berlin's Senate Department for Economics, Energy and Public Enterprises*</Bold>* as well as *<Bold>*Medienboard Berlin-Brandenburg*</Bold>*.
7	„Wir freuen uns sehr, dass die gamescom endlich wieder physisch stattfinden kann.	"We're very happy that gamescom can finally take place physically again.
8	Die Vielfalt der Unternehmen, die in der Business Area und in der Indie Arena Booth vor Ort sind, repräsentieren unseren spannenden und diversen Standort, der dynamisch wächst und sich dabei auch immer internationaler ausrichtet.", sagt Jeannine Koch, geschäftsführende Vorstandsvorsitzende des medianet.	The wide range of companies that will be in the Business Area and in the Indie Arena Booth will represent our exciting and diverse region, which is growing dynamically and, at the same time, becoming ever more international as well," commented Jeannine Koch, managing director of medianet.

9	In Übereinstimmung mit den Bemühungen der gamescom, eine nachhaltige Messe zu gestalten, wird auch der medianet-Gemeinschaftsauftritt von Berlin-Brandenburg ein Beispiel der regenerativen Bewegung sein.	In line with gamescom's mission to create a sustainable trade show, medianet's joint exhibition for Berlin and Brandenburg promotes renewability as well.
10	Neben einem papierreduzierten Messeauftritt und einem hauptsächlich vegetarischen und veganen Catering auf dem Messestand, ermöglicht medianet berlinbrandenburg zusammen mit dem Partner *<41>*gamescapital.berlin*</41>* und dem Mitaussteller GamesForest.Club die Unterstützung dreier Waldschutzprojekte durch den *<50>*GamesForest.Pin*</50>*.	Along with having reduced paper consumption and mainly vegetarian and vegan catering at their exhibition stand, medianet berlin-brandenburg, together with their partner gamescapital.berlin and co-exhibitor GamesForest.Club, will aid in the support of three forest conservation projects via their GamesForest.Pins.
11	Der Pin bietet Unternehmen eine attraktive Möglichkeit, ihre Mitarbeiter:innen und Spieler:innen zu belohnen, Biodiversität zu schützen und ihren ökologischen Fußabdruck zu verkleinern.	The pins offer an attractive opportunity for companies who wish to reward their employees and players, protect biodiversity, and reduce their climate footprint.
12	Auch für *<59>*Jeannine Koch*</59>* ist das Thema Nachhaltigkeit ein drängendes Anliegen:	The topic of sustainability is a pressing concern for *<Bold>*Jeannine Koch*</Bold>* as well:
13	„Es ist eine längst überfällige und unabdingbare Bewegung der Event-Branche, aber auch aller anderen Branchenzweige, dass nachhaltige Maßnahmen in die Planungen und Konzepte der Unternehmen einfließen.	"It is a long overdue and vital change within the event's sector, as well as in all other sectors, that companies take into account sustainable measures during the planning and concept stages.
14a	*<35>*Umso mehr freue ich mich, dass wir an unserem Stand in diesem Jahr beispielhaft skizzieren, wie so etwas aussehen könnte."*</35>*	It pleases me even more that this year we are demonstrating at our stand what such a thing could look like."
14b	*<35>*Mehr Informationen zum GamesForest.Club und wie man die GamesForest.Pins auf und vor der gamescom erhalten kann, finden Sie *</35>**<63>*hier*</63>**<69>*.*</69>*	More information on GamesForest.Club, and how one can obtain GamesForest.Pins at or before gamescom, can be found *<63>*here*</63>*.
15	*<69>*Schauen Sie sich *</69>**<70>*hier*</70>**<76>* den wachsenden gamescapital.berlin Forest an.*</76>*	Take a look at the growing gamescapital.berlin Forest *<70>*here*</70>*.
16a	https://gamesforest.club/blog/support-forest-projects-with-gamesforest-pins/	https://gamesforest.club/blog/support-forest-projects-with-gamesforest-pins/

1 6 b	forest (Öffnet in neuem Fenster)	forest (Opens in new window)
1 7		
1 8	https://gamesforest.club/?company=gamescapital.berlin	https://gamesforest.club/?company=gamescapital.berlin
1 9	club (Öffnet in neuem Fenster)	club (Opens in new window)
2 0	*<79>*Stephan Schwarz, Berliner Senator für Wirtschaft, Energie und Betriebe*</79>* betont:	*<Bold>*Stephan Schwarz, the Berlin Senator for Economics, Energy and Public Enterprises*</Bold>*, has emphasised that:
2 1	"Die Games-Szene ist wichtig für die Hauptstadtregion.	"The gaming scene is important for the capital region.
2 2	Auf der gamescom präsentiert sich die gesamte Bandbreite der in Berlin und Brandenburg stark wachsenden Branche.	At gamescom the entire breadth of the industry, which has been steadily growing in Berlin and Brandenburg, will be represented.
2 3	In der Business Area sind Games-Startups aus den Bereichen Blockchain, Development, Data Analytics, Marketing, Publishing und erstmals auch Nachhaltigkeit vertreten.	In the Business Area, there will be game start-ups, including those from the fields of blockchain, development, data analytics, marketing, publishing and, for the first time, sustainability.
2 4	In diesem Jahr sind zudem mehrere Indie-Entwickler dabei und stellen dem internationalen Fachpublikum ihre Spiele in der Indie Arena Booth vor.	Additionally, this year, various indie developers are taking part, introducing their games to the industry's international community at the Indie Arena Booth.
2 5	Diese geballte Präsenz auf der gamescom ist die beste Werbung für unsere Hauptstadtregion und das GamesCapitalBerlin."	Such a concentrated presence at gamescom is the best advertisement for our capital region and for GamesCapitalBerlin."
2 6	Herzlich eingeladen sind alle Messe-Teilnehmer:innen und Unternehmen zum *<94>*Berlin-Brandenburg Empfang des medianet-Gemeinschaftsauftritts*</94>*, der am *<103>*24. August um 12:00 Uhr*</103>* mit der Unterstützung von *<109>*Kickstarter*</109>* stattfindet.	All trade show participants and presenters are cordially invited to the *<Bold>*reception at medianet's Berlin-Brandenburg joint exhibition*</Bold>*, which is to take place on ~~the~~ *<Bold>*24th August at 12pm*</Bold>* with support from *<Bold>*Kickstarter*</Bold>*.
2 7	Erstmals wird der Empfang mit Katalonien durch eine Partnerregion unterstützt.	For the first time ever, a partner region of Berlin-Brandenburg's will be joining the reception - Catalonia.
2 8	Die Begrüßungsworte erfolgen durch *<115>*Dr. Severin Fischer, Chef der Berliner Senatskanzlei*</115>*.	The welcoming address will be given by *<Bold>*Dr~~.~~ Severin Fischer, Head of Berlin's Senate Chancellery*</Bold>*.
2 9	Außerdem können sich die Gäste auf eine Fusion aus klassischen Berliner Spezialitäten und spanischen Tapas sowie ausgiebigen Networking-Möglichkeiten freuen.	Guests can look forward to a fusion of traditional Berlin delicacies and Spanish tapas, alongside extensive opportunities for networking.

3 0	Darüber hinaus möchten wir Pressevertreter:innen ermöglichen, mit unseren Ausstellern sowie all unseren Partnern persönlich in Kontakt zu treten.	What's more, we would like to offer members of the press the chance to get into contact with our exhibitors as well as all our partners.
3 1	Für eine Terminabstimmung wenden Sie sich gerne an uns.	To make an appointment, please get in contact with us.
3 2	Die teilnehmenden Unternehmen, die sich auf die Business Area und die Indie Arena Booth aufteilen, sind Folgende:	The participating companies that will be spread across both the Business Area and the Indie Arena Booth are as follows:
3 3	Business Area:	Business Area:
3 4	Halle 4.1, Stand C061g – D070g	Hall 4.1, Stall C061g – D070g
3 5	Berlin Partner für Wirtschaft und Technologie GmbH	Berlin Partner für ~~Wirtschaft~~ Wirtschaft und Technologie GmbH
3 6	*<130>*CM Games*</130>*: unabhängiger Spieleentwickler	*<Bold>*CM Games*</Bold>*: an independent game developer
3 7	*<136>*data.ai europe limited*</136>*:	*<136>*data.ai europe limited*</136>*:
3 8	Unified Data AI-Plattform	A unified data AI platform
3 9	*<142>*DCMN GmbH*</142>*:	*<Bold>*DCMN GmbH*</Bold>*:
4 0	Growth Marketing Partner für digitale Unternehmen und Startups weltweit	A growth marketing partner for digital companies and start-ups worldwide
4 1	*<148>*GamesCoin Group GmbH*</148>*: das Ökosystem für eine ganz neue Spielwelt	*<Bold>*GamesCoin Group GmbH*</Bold>*: the ecosystem for a completely new game world
4 2	*<154>*Games Forest Club gGmbH*</154>*: gemeinnützige Organisation für eine klimafreundliche Zukunft	*<Bold>*Games Forest Club GmbH*</Bold>*: a non-profit organisation for a climate-friendly future
4 3	*<160>*Genvid Technologies Europe GmbH*</160>*:	*<160>*Genvid Technologies Europe GmbH*</160>*:
4 4	Livestreaming in Form von Massively Interactive Live Events	Live streaming through the form of 'Massively Interactive Live Events'
4 5	*<166>*Prismatika GmbH*</166>*:	*<166>*Prismatika GmbH*</166>*:
4 6	Boutique-Game-Publisher	A boutique game publisher
4 7	Wirtschaftsförderung Brandenburg	Economy Development Agency Brandenburg
4 8	Indie Arena Booth:	Indie Arena Booth:
4 9	Halle 10.2, Stand F010g – E011g	Hall 10.2, Stand F010g – E011g
5 0	*<178>*Happy Broccoli Games*</178>* – Kraken Academy	*<178>*Happy Broccoli Games*</178>* – Kraken Academy

5 1	<184>Stellar Cartography Interactive</184> – To the Stars	<184>Stellar Cartography Interactive</184> – To the Stars
5 2	Twisted Ramble Games – Duru	Twisted Ramble Games – Duru
5 3	<193>Sven Ahlgrimm, Mathilde Hoffmann</193> – ODDADA	<193>Sven Ahlgrimm, Mathilde Hoffmann</193> – ODDADA
5 4	Bei Rückfragen wenden Sie sich jederzeit gerne an uns.	For queries, please don't hesitate to contact us.
5 5	Pressekontakt:	Press contact:
5 6	<205>Alexander Fuchs PR & Marketing Manager medianet berlinbrandenburg e.V. Ackerstraße 3A 10115 Berlin T. +49 30 2462 85-716 </205><224>fuchs@medianet-bb.de</224>	<205>Alexander Fuchs PR & Marketing Manager medianet berlinbrandenburg e.V. Ackerstraße 3A 10115 Berlin Germany T. +49 30 2462 85-716 </205><224>fuchs@medianet-bb.de</224>
5 7	fuchs@medianet-bb.de	fuchs@medianet-bb.de
5 8	medianet	medianet

5.2. Source Text

Innovative Berlin-Brandenburger Games-Szene reist mit grünem Startup zur gamescom nach Köln

Pressemitteilung vom 08.08.2022

Einladung zum Empfang beim medianet-Gemeinschaftsauftritt am 24. August

Es ist wieder so weit: Die gamescom, das weltweit größte Event rund um Computer- und Videospiele und Europas führende Games-Business-Plattform, öffnet vom 24. bis 28. August 2022 ihre Tore. Dass es hierfür bereits zum neunten Mal einen Gemeinschaftsauftritt für Berlin und Brandenburg gibt, der vom **medianet berlinbrandenburg e.V.** organisiert und von der **Senatsverwaltung für Wirtschaft, Energie und Betriebe** sowie vom **Medienboard Berlin-Brandenburg** gefördert wird, wird von den beteiligten Unternehmen mit Begeisterung angenommen.

„Wir freuen uns sehr, dass die gamescom endlich wieder physisch stattfinden kann. Die Vielfalt der Unternehmen, die in der Business Area und in der Indie Arena Booth

vor Ort sind, repräsentieren unseren spannenden und diversen Standort, der dynamisch wächst und sich dabei auch immer internationaler ausrichtet.", sagt Jeannine Koch, geschäftsführende Vorstandsvorsitzende des medianet.

In Übereinstimmung mit den Bemühungen der gamescom, eine nachhaltige Messe zu gestalten, wird auch der medianet-Gemeinschaftsauftritt von Berlin-Brandenburg ein Beispiel der regenerativen Bewegung sein. Neben einem papierreduzierten Messeauftritt und einem hauptsächlich vegetarischen und veganen Catering auf dem Messestand, ermöglicht medianet berlinbrandenburg zusammen mit dem Partner **gamescapital.berlin** und dem Mitaussteller GamesForest.Club die Unterstützung dreier Waldschutzprojekte durch den **GamesForest.Pin**. Der Pin bietet Unternehmen eine attraktive Möglichkeit, ihre Mitarbeiter:innen und Spieler:innen zu belohnen, Biodiversität zu schützen und ihren ökologischen Fußabdruck zu verkleinern. Auch für **Jeannine Koch** ist das Thema Nachhaltigkeit ein drängendes Anliegen: „Es ist eine längst überfällige und unabdingbare Bewegung der Event-Branche, aber auch aller anderen Branchenzweige, dass nachhaltige Maßnahmen in die Planungen und Konzepte der Unternehmen einfließen. Umso mehr freue ich mich, dass wir an unserem Stand in diesem Jahr beispielhaft skizzieren, wie so etwas aussehen könnte." Mehr Informationen zum GamesForest.Club und wie man die GamesForest.Pins auf und vor der gamescom erhalten kann, finden Sie hier. Schauen Sie sich hier den wachsenden gamescapital.berlin Forest an.

Stephan Schwarz, Berliner Senator für Wirtschaft, Energie und Betriebe betont: "Die Games-Szene ist wichtig für die Hauptstadtregion. Auf der gamescom präsentiert sich die gesamte Bandbreite der in Berlin und Brandenburg stark wachsenden Branche. In der Business Area sind Games-Startups aus den Bereichen Blockchain, Development, Data Analytics, Marketing, Publishing und erstmals auch Nachhaltigkeit vertreten. In diesem Jahr sind zudem mehrere Indie-Entwickler dabei und stellen dem internationalen Fachpublikum ihre Spiele in der Indie Arena Booth vor. Diese geballte Präsenz auf der gamescom ist die beste Werbung für unsere Hauptstadtregion und das GamesCapitalBerlin."

Herzlich eingeladen sind alle Messe-Teilnehmer:innen und Unternehmen zum **Berlin-Brandenburg Empfang des medianet-Gemeinschaftsauftritts**, der am **24. August um 12:00 Uhr** mit der Unterstützung von **Kickstarter** stattfindet. Erstmals wird der Empfang mit Katalonien durch eine Partnerregion unterstützt. Die Begrüßungsworte erfolgen durch **Dr. Severin Fischer, Chef der Berliner Senatskanzlei**. Außerdem können sich die Gäste auf eine Fusion aus klassischen Berliner Spezialitäten und spanischen Tapas sowie ausgiebigen Networking-Möglichkeiten freuen.

Darüber hinaus möchten wir Pressevertreter:innen ermöglichen, mit unseren Ausstellern sowie all unseren Partnern persönlich in Kontakt zu treten. Für eine Terminabstimmung wenden Sie sich gerne an uns. Die teilnehmenden Unternehmen, die sich auf die Business Area und die Indie Arena Booth aufteilen, sind Folgende:

Business Area: Halle 4.1, Stand C061g – D070g

- **Berlin Partner für Wirtschaft und Technologie GmbH**
- **CM Games**: unabhängiger Spieleentwickler
- **data.ai europe limited**: Unified Data AI-Plattform
- **DCMN GmbH**: Growth Marketing Partner für digitale Unternehmen und Startups weltweit
- **GamesCoin Group GmbH**: das Ökosystem für eine ganz neue Spielwelt
- **Games Forest Club gGmbH**: gemeinnützige Organisation für eine klimafreundliche Zukunft
- **Genvid Technologies Europe GmbH**: Livestreaming in Form von Massively Interactive Live Events
- **Prismatika GmbH**: Boutique-Game-Publisher
- **Wirtschaftsförderung Brandenburg**

Indie Arena Booth: Halle 10.2, Stand F010g – E011g

- **Happy Broccoli Games** – Kraken Academy
- **Stellar Cartography Interactive** – To the Stars
- **Twisted Ramble Games – Duru**
- **Sven Ahlgrimm, Mathilde Hoffmann** – ODDADA

Bei Rückfragen wenden Sie sich jederzeit gerne an uns.

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5.3. Target Text

The Innovative Berlin-Brandenburg Gaming Scene Travels to Cologne to host Green Start-up at Gamescom

Press release from 8th August 2022

Invitation to the reception of medianet's joint Berlin-Brandenburg exhibition on 24th August

It's that time of year again: Gamescom, the largest event worldwide centred on computer and video games and Europe's leading gaming-business platform, opens its doors on 24th August 2022 and shuts them again on the 28th. This is the 9th time that Berlin and Brandenburg will appear together at gamescom, and the various companies involved have taken to their roles with excitement. The exhibition is organised by **medianet berlinbrandenburg e.V.** and sponsored by **Berlin's Senate Department for Economics, Energy and Public Enterprises** as well as **Medienboard Berlin-Brandenburg**.

"We're very happy that gamescom can finally take place physically again. The wide range of companies that will be in the Business Area and in the Indie Arena Booth will represent our exciting and diverse region, which is growing dynamically and, at the same time, becoming ever more international as well," commented Jeannine Koch, managing director of medianet.

In line with gamescom's mission to create a sustainable trade show, medianet's joint exhibition for Berlin and Brandenburg promotes renewability as well. Along with having reduced paper consumption and mainly vegetarian and vegan catering at their exhibition stand, medianet berlinbrandenburg, together with their partner gamescapital.berlin and co-exhibitor GamesForest.Club, will aid in the support of three forest conservation projects via their GamesForest.Pins. The pins offer an attractive opportunity for companies who wish to reward their employees and players, protect biodiversity, and reduce their climate footprint. The topic of sustainability is also a pressing concern for **Jeannine Koch** as well: "It is a long overdue and vital change within the events sector, as well as in all other sectors, that companies take into account sustainable measures during the planning and concept stages. It pleases me even more that this year we are demonstrating at our stand what such a thing could look like." More information on GamesForest.Club, and how one can obtain GamesForest.Pins at or before gamescom, can be found [here](). Take a look at the growing gamescapital.berlin Forest [here]().

Stephan Schwarz, the Berlin Senator for Economics, Energy and Public Enterprises, has emphasised that: "The gaming scene is important for the capital region. At gamescom the entire breadth of the industry, which has been steadily growing in Berlin and Brandenburg, will be present. In the Business Area, there will be game start-ups, including those from the fields of blockchain, development, data analytics, marketing, publishing and, for the first time, sustainability. Additionally, this year, various indie developers are taking part, introducing their games to the industry's international community at the Indie Arena Booth. Such a concentrated presence at gamescom is the best advertisement for our capital region and for GamesCapitalBerlin."

All trade show participants and presenters are cordially invited to the **reception at medianet's Berlin-Brandenburg joint exhibition**, which is to take place on **24th August at 12pm** with support from **Kickstarter**. For the first time ever, a partner region of Berlin-Brandenburg's will be joining the reception - Catalonia. The welcoming address will be given by **Dr Severin Fischer, Head of Berlin's Senate**

Chancellery. Guests can look forward to a fusion of traditional Berlin delicacies and Spanish tapas, alongside extensive opportunities for networking.

What's more, we would like to offer members of the press the chance to get into contact with our exhibitors as well as all our partners. To make an appointment, please get in contact with us. The participating companies that will be spread across both the Business Area and the Indie Arena Booth are as follows:

Business Area: Hall 4.1, Stall C061g – D070g

- **Berlin Partner für Wirtschaft und Technologie GmbH**
- **CM Games**: an independent game developer
- **data.ai europe limited**: A unified data AI platform
- **DCMN GmbH**: A growth marketing partner for digital companies and start-ups worldwide
- **GamesCoin Group GmbH**: the ecosystem for a completely new game world
- **Games Forest Club GmbH**: a non-profit organisation for a climate-friendly future
- **Genvid Technologies Europe GmbH**: Live streaming through the form of 'Massively Interactive Live Events'
- **Prismatika GmbH**: a boutique game publisher
- **Economy Development Agency Brandenburg**

Indie Arena Booth: Hall 10.2, Stand F010g – E011g

- **Happy Broccoli Games** – Kraken Academy
- **Stellar Cartography Interactive** – To the Stars
- **Twisted Ramble Games – Duru**
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For queries, please don't hesitate to contact us.

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5.4. Machine Translation Evaluation

Figure 1, Machine Translation using DeepL

TU	Source Text Segments	Machine Translated Target Segments
8	Die Vielfalt der Unternehmen, die in der Business Area und in der Indie Arena Booth vor Ort sind, repräsentieren unseren spannenden und diversen Standort, der dynamisch wächst und sich dabei auch immer internationaler ausrichtet.", sagt Jeannine Koch, geschäftsführende Vorstandsvorsitzende des medianet.	The variety of companies on site in the Business Area and in the Indie Arena Booth represent our exciting and diverse location, which is growing dynamically and also becoming more and more international," says Jeannine Koch, Executive Chairwoman of medianet.
9	In Übereinstimmung mit den Bemühungen der gamescom, eine nachhaltige Messe zu gestalten, wird auch der medianet-Gemeinschaftsauftritt von Berlin-Brandenburg ein Beispiel der regenerativen Bewegung sein.	In line with gamescom's efforts to create a sustainable trade fair, the medianet joint appearance of Berlin-Brandenburg will also be an example of the regenerative movement.
10	Neben einem papierreduzierten Messeauftritt und einem hauptsächlich vegetarischen und veganen Catering auf dem Messestand, ermöglicht medianet berlinbrandenburg zusammen mit dem Partner gamescapital.berlin und dem Mitaussteller GamesForest.Club die Unterstützung dreier Waldschutzprojekte durch den GamesForest.Pin.	In addition to a paper-reduced trade fair presence and mainly vegetarian and vegan catering at the trade fair stand, medianet berlinbrandenburg, together with partner gamescapital.berlin and co-exhibitor GamesForest.Club, enables GamesForest.Pin to support three forest conservation projects.
20	Stephan Schwarz, Berliner Senator für Wirtschaft, Energie und Betriebe betont:	Stephan Schwarz, Berlin's Senator for Economic Affairs, Energy and Industry, emphasises:
21	"Die Games-Szene ist wichtig für die Hauptstadtregion.	"The games scene is important for the capital region.
22	Auf der gamescom präsentiert sich die gesamte Bandbreite der in Berlin und Brandenburg stark wachsenden Branche.	The entire spectrum of the industry, which is growing strongly in Berlin and Brandenburg, is presented at gamescom.

Figure 2, Post-edited MT vs Human Translation

TU	Human Translated Target Text Segments	Post-Edited MT Target Text Segments
8	The wide range of companies that will be in the Business Area and in the Indie Arena Booth will represent our exciting and diverse region, which is growing dynamically and, at the same time, becoming ever more	The variety of companies on site in the Business Area and in the Indie Arena Booth will represent our exciting and diverse ~~location~~ region, which is growing dynamically and also becoming more and more international," says Jeannine Koch, Executive Chairwoman of medianet.

	international as well," commented Jeannine Koch, managing director of medianet.	
9	In line with gamescom's mission to create a sustainable trade show, medianet's joint exhibition for Berlin and Brandenburg promotes renewability as well.	In line with gamescom's efforts to create a sustainable trade ~~fair~~ show, the medianet ~~joint appearance of~~ Berlin-Brandenburg joint exhibition will also be an example of ~~the regenerative movement~~ sustainability.
10	Along with having reduced paper consumption and mainly vegetarian and vegan catering at their exhibition stand, medianet berlin-brandenburg, together with their partner gamescapital.berlin and co-exhibitor GamesForest.Club, will aid in the support of three forest conservation projects via their GamesForest.Pins.	In addition to having ~~a paper-reduced~~ ~~trade fair presence~~ reduced paper waste, and mainly vegetarian and vegan catering at the trade ~~fair~~ show stand, medianet berlinbrandenburg, together with partner gamescapital.berlin and co-exhibitor GamesForest.Club, ~~enables GamesForest.Pin~~ will make it possible to support three forest conservation projects with their GamesForest.Pins.
20	Stephan Schwarz, the Berlin Senator for Economics, Energy and Public Enterprises, emphasised that,	Stephan Schwarz, Berlin's Senator for Economic Affairs, Energy and Industry, ~~emphasises~~ has emphasised that:
21	"The gaming scene is important for our metropolitan region.	"The games scene is important for the capital region.
22	At gamescom the entire industry, which has been steadily growing in Berlin and Brandenburg, will be present.	The entire ~~spectrum~~ breadth of the industry, which is growing strongly in Berlin and Brandenburg,~~is~~ will be presented at gamescom.

(post-editing: full, bilingual)

Figure 3, MT Evaluation: Monolingual

a) Intelligibility/Fidelity Scales (Chunya, 2014)
- Where intelligibility is: how much can be understood
- And fidelity is: how accurate is the meaning

Point Scale	Intelligibility	Fidelity
5	Flawless	All
4	Good	Most
3	Non-native	Much
2	Disfluent	Little
1	Incomprehensible	None

b) Results

TU	Machine Translated Target Segment	Intelligibility Score	Fidelity Score
8	The variety of companies on site in the Business Area and in the Indie Arena Booth represent our exciting and diverse location,	4	4

	which is growing dynamically and also becoming more and more international," says Jeannine Koch, Executive Chairwoman of medianet.		
9	In line with gamescom's efforts to create a sustainable trade fair, the medianet joint appearance of Berlin-Brandenburg will also be an example of the regenerative movement.	5	3
10	In addition to a paper-reduced trade fair presence and mainly vegetarian and vegan catering at the trade fair stand, medianet berlinbrandenburg, together with partner gamescapital.berlin and co-exhibitor GamesForest.Club, enables GamesForest.Pin to support three forest conservation projects.	3	3
20	Stephan Schwarz, Berlin's Senator for Economic Affairs, Energy and Industry, emphasises:	3	5
21	"The games scene is important for the capital region.	5	5
22	The entire spectrum of the industry, which is growing strongly in Berlin and Brandenburg, is presented at gamescom.	5	4

Figure 4, MT Evaluation: Bilingual

a) Adequacy scale (Moorkens, 2018, p.380):

Point Scale	Amount of Meaning Conveyed
3	All of it
2	Most of it
1	Little of it
0	None of it

b) Accuracy scale (Trujillo, 1999, pp.259-260):

Point Scale	Accuracy of Meaning Conveyed
7	Faithfully conveyed, meaning clear, no rewriting
6	Faithfully conveyed, meaning clear, some rewriting
5	Faithfully conveyed, some semantic changes
4	Mostly conveyed, issues with lexical accuracy
3	Not adequately conveyed, omissions, syntactic errors
2	ST meaning is not conveyed
1	ST meaning is absent, and result is incoherent

c) Results

Target Unit	Adequacy Rating	Number of Challenges	Accuracy Rating
8	2	2	6
9	1	3	6
10	2	6	4
20	3	1	5
21	3	0	6
22	3	2	6

d) Challenges

Type of Challenge	Frequency
Lexical Ambiguity	6
Lexical Mismatches	3
Structural Ambiguity	1
Structural Mismatches	4

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- Online material was last accessed 23rd January 2023.
- Highlighted entries in 6.2 were used in the production of the TM and TB.
- Referencing Style: Harvard (Cite Them Right 12th edition)

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