



Seamless Translation with AI

Leveraging Automatic Quality Estimation

Technology Department

2024



AQE

In today's fast-moving global market, high-quality translation is more than a necessity — it's a game-changer. At Seprotec, we're taking translation to the next level with AI-powered technology that combines speed with accuracy. Our Automatic Quality Estimation (AQE) technology doesn't just streamline translation; it helps ensure the quality you need with less time and effort.

This eBook looks at how AQE works seamlessly within your translation process, offering real-time insights into quality, cost savings, and the perfect mix of AI precision with human expertise. Read on to see how Seprotec's AQE solutions are reshaping translation for businesses everywhere, giving you faster, reliable results that keep up with the demands of today's global marketplace.



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AI-Powered Real-Time Translation Hub

AI-powered Automatic Quality Estimation (AQE) is transforming the translation industry by providing real-time assessments of machine translation (MT) output. Seprotect's AQE solution, powered by AI and Natural Language Processing (NLP), evaluates fluency, grammar, and vocabulary to provide an assessment of machine translation quality.

- Click one: get the best machine translation.
- Click two: get an estimation of the machine translation quality.
- Click three: send it for human correction and editing if needed.

Experience seamless, on-demand fast translations through a user-friendly interface with human post-editing just a click away.

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What is Automatic Quality Estimation (AQE)?

AQE's primary role is to provide a real-time evaluation of machine translation output. This assessment is typically done without needing a reference (such as a professionally translated version of the text), making it a valuable tool for ensuring quality in large-scale translation projects where human review of every segment may not be feasible.

Powered by Large Language Models (LLMs) and NLP models trained on extensive datasets of human-evaluated translations, our system identifies patterns and discrepancies that influence translation quality.

Receiving comments on potential errors categorized as High, Medium or Low impact.

- Errors will be presented as identified together with suggestions for improvement.
- There is also the possibility of downloading the file with comments inserted.

Need additional assurance?

Human intervention is available at the click of a button.





How You Can Benefit from Seprotec's AQE Solutions:



Cost Efficiency

By identifying only translations that require attention, AQE helps reduce the need for human intervention and only the documents that are critical for you need to be sent for human correction and editing, hence saving both time and money.

Real-time Feedback

It allows you to receive instant assessment on the critical potential errors in a translated document and to decide whether human intervention is required for further refinement.

Customizability

AQE can be adapted to specific industries, styles, and preferences, ensuring the translations meet the specific needs of your company and department.

Best Use Cases for Most Efficient Practices:

- | | | |
|--|--|---|
| ▪ Quality assurance of your monolingual content. | ▪ Machine translation and evaluation of documents. | ▪ Evaluation of documents translated by humans. |
|--|--|---|



The diagram illustrates the evolution of machine translation through four stages, each represented by a dark blue pill-shaped box with white text. Below each box is a description of its role. The stages are connected by a series of blue and grey arrows indicating a flow and feedback loop.

- Language Service**: Experts at the core to assess efficiency. A grey arrow points down from this box to its description.
- Machine Translation**: Designed to reproduce deterministic technologies. A grey arrow points down from this box to its description. A blue arrow points from the Language Service box to this one, and another blue arrow points from this box back to the Language Service box.
- Empowered by AI**: Designed to create and improve language. A grey arrow points down from this box to its description. A blue arrow points from the Machine Translation box to this one, and another blue arrow points from this box back to the Machine Translation box.
- Human in the loop**: Experts in the loop to deliver finished translations **fit to purpose**. A grey arrow points down from this box to its description. A blue arrow points from the Empowered by AI box to this one, and another blue arrow points from this box back to the Empowered by AI box.

Overall, the diagram shows a progression from a core service to a more sophisticated, AI-enhanced system, with human experts remaining involved in the final stage to ensure the quality and purpose of the translations.

Machine Translation

Automated translations of texts or documents using general, customized, or hybrid MT models.

Automatic Quality Estimation

Real-time quality assessment of texts and documents: original, translation or both.

Automatic Post-Editing

Automatic post-editing of machine-translated content as a further quality improvement step, empowered by LLM and NLP.

Document Processing

Digitization of multilingual documents using AI as well as extraction and validation of document information.

Document Conversion

Extraction of text using optical character recognition (OCR) while preserving the integrity of the content.

Content Creation

Speedily creating multilingual content powered by AI that appeals to your target audience.



Our AI Platform in Action

Our AI platform offers a user-friendly experience, accessible through your browser or via API integration.



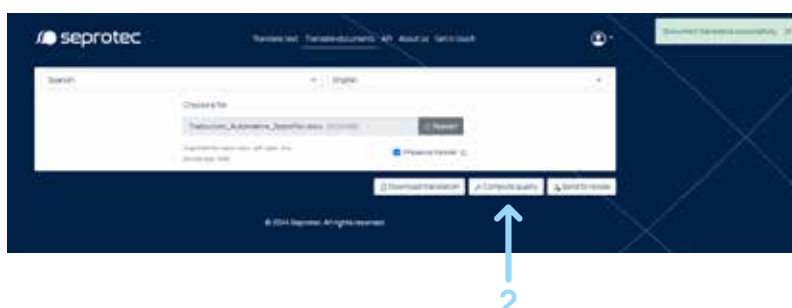
Additionally, with just a few clicks, you can:

select languages, upload the document and click for machine translation.

It allows you to machine translate your files whenever you need in a secure environment, using both general and customized MT models.



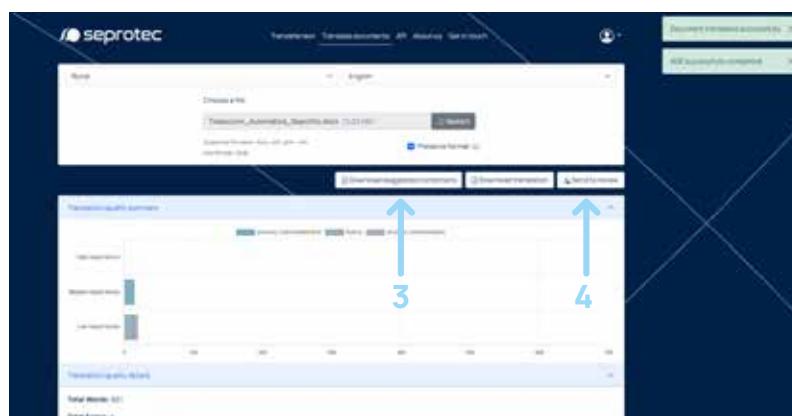
Get a first analysis of the quality, with errors categorized as high, medium and low impact.





Receive feedback on how to improve such errors and download the translated document with comments inserted.

Send it for human editing if you need a higher quality solution.



In the downloaded file you will find detailed recommendations, including comments on areas for improvement.

Consultancy
As a leading provider of language solutions, we understand that every organization's needs are different, and so are its machine translation needs with or without post-editing.
We understand the importance of carrying out a prior analysis before implementing any technology and that is why our experts work with our clients to select the solution that best suits the needs of their project.
Working closely with the client:

- We evaluate the quality and suitability of any technology, whether it is the client's own, created specifically by us or available on the market.
- **We prepare the most suitable technology for the client, customizing the machine translation engines.**
- We carry out maintenance and updating of custom-created technologies.

Machine translation



For a closer look, click here to watch a demonstration video and see how the platform's features can transform your translation process.



Here's how AQE adds value at each stage

Tailored for You

AQE can be integrated with Translation Management Systems (TMS) and workflows, requiring minimal adjustments for adoption. Whether you're utilizing machine translation, human translation, or a hybrid model, AQE is fully customizable to suit your unique needs.

Automated Quality Reporting

Upon completion of translations or content creation, AQE generates real-time quality assessments. These reports highlight key areas that may require further attention, helping you pinpoint areas where human intervention might be necessary.



The Role of Human Supervision in the Age of AQE

While AQE brings efficiency and speed through AI, human expertise remains essential to ensure the highest quality in content assessment. This human-at-the-core approach combines the strengths of automation with the irreplaceable insights of skilled language specialists and engineers.



Where are humans in the loop?

Post-editing

Human expertise will provide the best quality for high-priority content; tailoring the final output.

Where are humans at the core?

Training and Evaluating MT Systems

Human experts play a vital role in training and fine-tuning MT engines and AQE, ensuring that the models learn and improve.

Experience the perfect blend of language technology and human expertise, so that your content fits your needs.





Measuring the ROI of AQE Implementation



Evaluating the Return on Investment (ROI) for Automatic Quality Estimation (AQE) is essential for understanding its long-term benefits. AQE drives efficiency and cost savings by reducing the need for human intervention and optimizing translation quality at key stages of the workflow.

- 01. Fast self-service:** Fast translations just a click away - in a world in which we rely increasingly on getting everything fast this platform will help our customers access the product in seconds.
- 02. MT improved by AI:** Receive improved quality and access customized and tailored MT adapted to your style.
- 03. Time Savings:** Get a first version using the best MT model available, receive a quick evaluation of the quality and decide whether the fast MT translation is good enough for your purpose.
- 04. Human in the loop:** Send it for human revision and editing if you want to ensure your translation is accurate and of best quality.
- 05. Ensure confidentiality:** Access fast machine translation within a reliable and secure environment without worrying about sharing confidential information on the web by using free solutions.



Questions About AQE

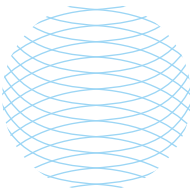
Using our Portal and applying Automatic Quality Estimation (AQE) can raise several questions and concerns for organizations.



01. How does AQE ensure data security?

Security is a top priority when handling sensitive information. Seprotect works according to the principles laid down in ISO 27001, making AQE suitable for handling sensitive documents with complete confidentiality.

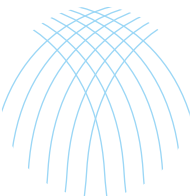
Our platform is hosted by AWS in Frankfurt and can be deployed on your own servers and even on-site. We can fully adapt to your needs.



02. What languages can be evaluated using AQE?

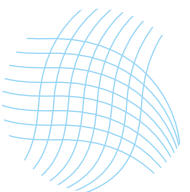
AQE is a general model that can be adapted to a wide range of languages (Spanish, English, Polish, German, French and Italian are among the main ones). As this is a fully adaptable and customizable solution, there are a large number of languages that we can support.

Feel free to contact us for more details if you have specific needs.



03. Is AQE appropriate for all industries?

AQE can be fully adapted and customized to fit your style, industry, department, product, market and so on. But even though AQE can provide a reliable analysis of the quality of the text in a few seconds, we usually recommend human intervention depending on the type of document as there are still areas where humans are more proficient.



04. Will AQE replace human linguists?

No, AQE is designed to complement human linguist experts, not replace them. It flags only those sentences that need attention, allowing human experts to focus on high-priority areas. By optimizing the translation workflow, AQE ensures that human reviewers spend their time where it's most needed, increasing both efficiency and quality without eliminating the human touch.

Ready to take the next step?

Contact us today for a demonstration or consultation to see how AQE can transform your translation process and help you stay ahead in the global marketplace.

About Seprotec

Seprotec Multilingual Solutions is a trusted technology-enabled partner to thousands of multinational organizations, improving their sales by delivering superior content and services and facilitating communication in their customer's native languages, while protecting their most valuable assets, their Intellectual Property, across all industries in over 220 languages.

Seprotec has been seamlessly integrating technology and linguistic services for the past 15 years, not only to manage production but also to enhance the project management processes.

As a technology agnostic company, we always use the available solutions that best fit with our clients' needs and can best be integrated in their frameworks and systems.

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