

MaTIAS – Machine Translation to Inform Asylum Seekers: final results

**July De Wilde, Anaïs Wouters, Arda Tezcan, Simon Van den Meersschaut,
Katrijn Maryns and Lieve Macken**

Department of Translation, Interpreting and Communication
Ghent University
Belgium
`{firstname.lastname}@ugent.be`

Abstract

This paper reports on the final stages of the MaTIAS project. A functional prototype of the multilingual notification tool was deployed across seven Belgian reception centres, accompanied by training and support. Feedback was gathered through interviews and surveys. Two rounds of machine translation evaluation revealed considerable differences in quality across languages. The translation quality of Tigrinya in particular was deemed too low to be usable.

1 Context and project overview

Asylum reception centres typically accommodate a highly diverse population with a variety of linguistic backgrounds, inevitably yielding communication barriers. Staff members frequently have to disseminate time-sensitive information ranging from administrative appointments and house rules to maintenance updates and transport disruptions, but they often face language obstacles. As a result, residents may misunderstand expectations or miss essential updates, leading to communication gaps.

To address this issue, a research team at Ghent University has developed MaTIAS (Machine Translation to Inform Asylum Seekers), a multilingual notification tool which enables staff to send messages via WhatsApp to residents in their native languages. Designed for one-way communication, the tool ensures the rapid delivery of simple informational messages (such as updates about activities or technical issues) to groups of residents, while more complex and sensitive interac-

tions requiring resident input are handled through other language support channels.

Messages are composed in Dutch, French or English via a user-friendly web interface and automatically translated by ModernMT, customised with a context-specific translation memory.

The 2023–2025 project has been carried out in close collaboration with Fedasil, the federal agency for the reception of asylum seekers in Belgium. It has been co-financed by the European Commission under the Asylum, Migration and Integration Fund (AMIF 093-133). This contribution focuses on the final phases of the project: the deployment and evaluation of a functional prototype in several asylum centres, and the usability of the automatic translations.

2 Prototype deployment and evaluation

The MaTIAS prototype consists of a web platform that enables Fedasil staff to translate messages from Dutch, French, or English into 14¹ additional target languages, including several low-resource languages. The platform supports resident registration, message composition, and communication history review through an intuitive interface designed to minimize staff workload. A key feature is its integration with Fedasil’s database, automatically synchronizing resident data every 24 hours to eliminate manual updates.

For the evaluation phase, MaTIAS was deployed on Fedasil servers to assess its usability in a live operational environment. We adopted a phased rollout strategy across seven reception centers in Flanders, Brussels, and Wallonia, to ensure technical stability and manageable user support. This phased approach integrated demos for each

© 2026 The authors. This article is licensed under a Creative Commons 4.0 licence, no derivative works, attribution, CC-BY-ND.

¹These 14 languages were selected by Fedasil based on current needs.

new center added to the test pool, allowing the research team to provide tailored training. The demo sessions took place between October and November 2025 and were either given on-site or online via Microsoft Teams. A separate Microsoft Teams channel per center provided direct feedback and support, especially for initial technical issues with server and database connections.

Employee feedback was gathered through online interviews and a Qualtrics survey, involving 13 and 9 participants respectively. Staff members rated MaTIAS as user-friendly, highlighting the ease of resident registration, recipient selection, and message sending. Additional features like message reuse and delayed sending were also well utilized. The tool was primarily used for practical and organizational communication. Analysis showed that most translations were into French, English, Tigrinya, Turkish, Arabic, and Somali. Feedback from residents, collected by centre staff, was very positive: most residents found the system clear, user-friendly and accessible. However, analysis of the data revealed that not all registered residents read the messages.

3 Machine translation quality

The quality and usefulness of the automatically translated messages were assessed in two evaluations. The first, conducted in May–June 2025, covered all 14 target languages and involved 28 language experts, using 90 messages collected during the project’s preparatory ethnographic phase. Results showed substantial variation in quality across languages, with translations into Tigrinya, Somali, and Persian remaining suboptimal. For detailed results, we refer to the publication of Macken et al. (2025). The second took place in March 2026 and focused on five target languages: Tigrinya, Arabic, Somali, Pashto, and Persian. For each language, a set of 40 actual messages collected during the test phase was assessed by one language expert. Although the Arabic, Persian and Somali translations were acceptable, they sometimes required effort to understand. The Pashto messages, on the other hand, were overly formal and poorly aligned with spoken language. The Tigrinya results were particularly poor, often losing the core meaning.

4 Discussion and recommendations

The results of the test phase demonstrate the potential of MaTIAS to enhance multilingual com-

munication in reception centres. While the tool has demonstrated its potential to improve communication and reduce language barriers, several key considerations must be addressed to ensure successful integration and scalability: (1) Tools must be embedded in existing workflows to ensure a manageable workload for staff. Automating resident registration via database synchronisation proved essential for maintaining data consistency and minimising manual administrative effort. (2) GDPR and data protection compliance are paramount. Clear communication regarding data storage and protection is essential for maintaining trust and upholding ethical standards when working with vulnerable populations. The paid version of ModernMT was found to offer sufficient privacy safeguards², and staff were explicitly instructed through training and the user manual never to include personal data in messages. (3) As the system scales, it is vital to define clear roles and communication protocols. Specific guidelines on message frequency and thematic relevance must be established to prevent information overload and ensure the tool remains effective. (4) While ModernMT provides a strong baseline, achieving high-quality translation for certain low-resource languages remains challenging. Recent research (Moerman et al., 2026) has explored whether the in-context learning capabilities of large language models (LLMs) could offer a solution, though results have been variable.

Of course, the full impact of MaTIAS on efficiency and time savings, and areas for improvement, will only become clear after full implementation across the entire Fedasil reception network.

References

- Macken, Lieve, Margot Fonteyne, Arda Tezcan, Ella van Hest, Katrijn Maryns, and July De Wilde. 2025. Machine translation in asylum reception centres : system selection and multilingual quality evaluation. *Revista Tradumàtica. Tecnologies de la Traducció*, (23):326–349.
- Moerman, Thomas, Arda Tezcan, and Lieve Macken. 2026. Multilingual Communication in the Asylum Context: Evaluating LLM-Based Machine Translation with Fuzzy-Match Augmentation and Adaptive NMT across Resource Conditions under Low-Data Constraints. In *Proceedings of the 26th Annual Conference of the European Association for Machine Translation*, Tilburg, The Netherlands.

²See ModernMT’s privacy policy: <https://www.modernmt.com/privacy>