



## *Artificial Intelligence and Machine Translation*

# **SYSTRAN: 1<sup>st</sup> software provider to launch a Neural Machine Translation engine in more than 30 languages**

**Objective: help companies meet the challenges of globalization!**

Paris, France, October 17<sup>th</sup>, 2016 - Initially announced at the end of August, following an intensive phase of research and development on artificial neural networks and deep learning algorithms, SYSTRAN launches its new engine called PNMT™ for Pure Neural™ Machine Translation. In the digital age, language barriers have until now represented one of the biggest challenges to rapid deployment of business strategies among global markets. Businesses now have the opportunity to explore new prospects thanks to advances in artificial intelligence and machine translation R&D.

With this highly innovative solution, SYSTRAN continues its quest for technological excellence in order to help companies succeed in the age of real-time, 24/7 global communication. SYSTRAN offers organizations access to the best translation quality on the market, closer than ever to human fluency and adapted to the specific contexts of each customer, ranging from the legal and automotive industry to IT and tourism. Companies can deploy their business strategy in several countries at the same time, breaking down the language barrier and bringing out phenomenal gains in terms of time to market and productivity.

**A client beta program and an online demo available here: <http://demo-pnmt.systran.net>**

This first phase of commercialization begins with the release of an online demo covering a wide variety of languages (European, Asian, Arabic) and language pairs (for example Dutch<>French, Korean<>Japanese) and the launch of a beta test program including a dozen of SYSTRAN's corporate customers in diverse industries. In December, SYSTRAN will communicate the feedback received on Pure Neural™ Machine Translation, its roadmap and time to market plan.

*"We are living in a historic moment in the field of machine translation," says **Jean Senellart**, CTO of SYSTRAN Group. "We are at the very beginning of a new era that opens up horizons in multilingual communication. We are proud to place this technology in the hands of our customers and thus test it with specific business cases. We look forward to receiving their feedback in order to prioritize our future developments and accompany them in their growth in this new era."*

### **Artificial intelligence: a self-learning translation machine**

The major advancement a neural engine (NMT for Neural Machine Translation) provides, compared to the current engines on the market - statistical (SMT for Statistical Machine Translation) and rule-based (RBMT for Rule Based Machine Translation) - is produced by artificial neural networks. **Similar to the human brain, the machine learns through a process in which the machine receives a series of stimuli over several weeks.** This development based on complex algorithms at the forefront of Deep Learning, enables the PNMT™ (Pure Neural™ Machine Translation) engine to learn, generate the rules of a language from a given translated text, and produce a human-like translation, which in some cases can be even better than a human translation.



## Contributing and sharing, SYSTRAN's credo

SYSTRAN's R&D team is proud to share its innovative research by contributing to an open source project initiated by Harvard NLP Research Laboratory and by publishing an exhaustive technical report to share its findings. SYSTRAN is also committed to familiarizing the market with this new technology by regularly writing outreach articles on its blog. After publishing an article describing the origins of NMT and why this technology is disruptive, a second one posted today and entitled "[\*How does Neural Machine Translation work\*](#)" decrypts the various translation processes illustrated with concrete examples.

**François Massemin**, Vice-president Operations of SYSTRAN concludes: *"Translation quality has taken a quantum leap because of our PNMT™ engine. Post-editing, which is very time-consuming, will be reduced and productivity increased. This is in addition to the other assets that have forged SYSTRAN's reputation, including the integration of customers' terminology (for example for automotive or legal industries), speed of implementation, security, respect of data privacy and intellectual property of translated content (which is impossible with the free web translations tools). More than ever, SYSTRAN helps corporations meet the challenges of globalization, time to market and lean management."*

## About SYSTRAN

To help organizations enhance multilingual communication and increase productivity, SYSTRAN delivers specialized language solutions for global collaboration, search, eDiscovery, content management, customer support, e-commerce and localization projects.

With the ability to facilitate communication in 140+ language combinations with highly secured and custom-made solutions, SYSTRAN is the leading choice of corporates, defense and security organizations, and language service providers.

Since its early beginnings, SYSTRAN has been pioneering advances in Machine Translation and Natural Language Processing and delivers today a new generation of engines leveraging the latest technological innovations from Artificial Neural Networks and Deep Learning models.

For more information, visit [www.systrangroup.com](http://www.systrangroup.com) and <http://blog.systransoft.com>

## Contacts

### **Gaëlle BOU**

Marketing & Communications Director, SYSTRAN

Phone: +33 (0)1 44 82 49 00

Email: [gaelle.bou@systrangroup.com](mailto:gaelle.bou@systrangroup.com)