

LKA/Nanalysis Partnership - Summary Brief and Future Vision

Calgary, Alberta January 13, 2020

Nanalysis (TSXV:NSCI) and Landeskriminalamt of Lower Saxony (LKA) announced that as of December 10th 2019, they are jointly developing enhancements to Nanalysis devices that will specialize units for mobile drug detection.

To view the full release, click **HERE**

Overview

Tests for detecting illicit drugs cannot reliably identify the growing number of manufactured illegal drugs as well as commonly added 'fillers', such as caffeine, acetaminophen, etc. New synthetic variations of common narcotics are appearing on the market more and more frequently as drug manufacturers become increasingly sophisticated. To respond, law enforcement agencies around the world are searching for a reliable method to test drugs in the field as accurately and rapidly as possible. While existing NMR technology can and does identify illegal narcotics in laboratories, the accessibility, affordability, and size of these large machines prevents onsite application of the technology.

The LKA has partnered with Nanalysis to construct a database of known drugs and fillers which can be referenced when a sample is being tested. This database combined with data analytics capabilities, will increase test accuracy and reduce the time to identify the suspicious substance. This technology will also be able to flag and classify new variations of designer drugs. Nanalysis will work with the LKA to write a white paper describing the project's methodology and results. The company plans to then use the white paper to engage with other security services around the world to deploy its database and mobile NMR devices with field narcotics teams.

Market Opportunity

Law enforcement organizations are increasingly implementing mobile technology solutions to solve problems more rapidly and the opioid epidemic is among the top priority public health issues across Europe and North America making this project an important project for Nanalysis.

- The Department of Homeland Security will spend \$44.2M on fast, non-intrusive inspection technology in 2019¹.
- The DEA spend almost \$41M on Transnational Organized Crime and Opioids in 2019².
- The FBI listed "Transnational Organized Crime" and "Opioids" as their second and third "Criminal Threats" (respectively) in their 2019 budget request³.
- The EU plans to spend €1.3B on customs control equipment between 2021-2027, including mobile laboratories for sample analysis.⁴
- Canadian police forces spent a combined \$224.4M on hardware and software/applications in 2018⁵.

Strategic Shift

The database being constructed will enable intelligent drug identification and will provide software tools that will enhance the ability to identify trends and patterns in the drug trade in terms of both chemical composition and distribution practices. Test data is logged and could be sharable securely between officers and external agencies, if required.

Data analytics service revenue, such as would be generated from the new database-analytics product, is typically valued by the capital markets quite differently than traditional manufacturing revenue which often results in a shift in valuation multiple as the revenue/earnings profile shifts.

¹ DHS 2019 budget - pp30

² 2019 DEA budget

³ 2019 FBI budget request

⁴ Long-term EU customs budget (2021-2027)

⁵ 2018 Canadian police IT budget