

Cameras and Intelligence

We envision a smart network, with advanced capabilities, that allows Ericsson to get additional revenue streams beyond just connectivity. Computer vision intelligence is one such capability that can be built into the network to provide significant value to many industries and users. Cameras are the most pervasive sensors deployed and deployment numbers are growing rapidly. Cameras today can provide high fidelity information, while being inexpensive, easy-to-use and versatile. Some examples:

- 25.1 million smart home cameras are expected to be shipped this year
- The city of Chicago has about 30,000 government operated closed-circuit cameras
- Dallas has about 1800 cameras on its toll roads -- used to monitor for traffic conditions, stalled vehicles, accidents, wrong way driving, etc.
- Huge number of cameras are deployed in retail, office space and manufacturing plants

They produce lots of data – video streaming with high frame rates and high-resolution images. Additionally, modern AI-based image processing techniques have allowed incredible insights to be extracted from these video streams –object detection, human behavior analysis, photogrammetry for 3D construction etc. All of this requires more and more bandwidth and significant processing power.

To capture the value of the video streams coupled with AI-based processing, we're envisioning the future network will be more intelligent with **built in computer vision capabilities**. Key value propositions are low-latency, high resolution images and fantastic processing capabilities. Processing can be "on the edge" or cloud compute, depending on the application.

We're looking for technically-feasible ideas about use cases – problems that could be solved -- with such a network-based, AI-driven, vision system. We encourage ideas that can deliver immediate value through a locally deployed network – think small area – such as a manufacturing plant, warehouse, hospital or traffic intersection. The use case could then be scaled to a much larger area and become a significant business.

We challenge you to think beyond the "big brother" approach of video surveillance for security purposes and focus on business problems that can be alleviated, business processes that can be optimized, or chores simplified, by cameras and processing.