

# The Way 4WARD to a Creation of a Future Internet

Henrik Abramowicz  
Ericsson, Sweden  
henrik.abramowicz@ericsson.com

Today's network architectures are stifling innovation, restricting it mostly to the application level while the need for structural change is increasingly evident. Our inadequate capability to design, optimize, operate, and inter-operate new networks currently forces a convergence to an architecture that is suboptimal for many applications and that cannot support innovations within itself, the Internet.

The 4WARD project overcomes this boxed-in situation by investigating a set of radical architectural approaches from our strength in mobile and wireless. We improve our ability to design inter-operable and complementary families of network architectures. We enable the co-existence of multiple networks on common platforms through carrier-grade virtualization for networking resources. We enhance the utility of networks by making them self-managing. We increase their robustness and efficiency by leveraging diversity. Finally we improve application support by a new information-centric paradigm, instead of the old host-centric approach. These solutions will embrace the full range of technologies, from fibre backbones to wireless and sensor networks.

Furthermore it will be discussed possible strategies for a creation of a future internet and a comparison with mobile networks (re-)evolution.