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Nokia FlexiFamily™ platforms provide an open carrier-grade foundation for All-IP Mobility Systems

All-IP architecture enables growth beyond the present voice-centric service paradigm. Combining multiple media streams, such as rich call, messaging and browsing services, into a single session will generate additional traffic and revenue streams. However, a seamless communication experience can only be achieved by moving mobile systems to All-IP. Packet-based traffic is carried over a single network, providing optimized quality of service, total scalability and thus the lowest cost per bit. As All-IP complements GPRS and EDGE/WCDMA, it preserves investments made in today's network, and supports add-on capabilities and capacity for increasing and profitable traffic.

In order to offer affordable data services for everybody, industry-wide standardisation of interfaces is required, through forums like 3GPP, WAP Forum, Wireless Village and IPv6 Forum. However, this is not sufficient, and therefore Nokia invites other industry players to share and standardize open specifications for interfaces of All-IP platforms. The Carrier Grade Linux Working Group (under Open Source Development Lab) and Service Availability™ Forum industry initiatives, support flexible and low risk adoption of new technologies now and in the future. It is Nokia's role to contribute to standardization initiatives and implement them in products, using a "Networked Product Creation" environment. This creates an ecosystem with economies of scale and leveraging capabilities – enabling industry innovation for all parties in the value chain. The use of a standards-based system, platforms, software components and mainstream hardware, reduces development, deployment and operating costs to enable mobile data services to take off.

The Nokia FlexiFamily platforms consist of:

Nokia FlexiServer™, in the network domain, is an open carrier-grade server platform using the Linux® operating system. FlexiServer will be the foundation for core-network products with functions such as session control and registers. In radio access, FlexiServer is used for managing the signalling plane of mobility control functions, including common radio resource management. FlexiServer, as a foundation for NetAct-based Operational Support System, can complement a unified platform usage.

Nokia FlexiGateway™, in the network domain, is an open carrier-grade gateway platform. FlexiGateway is the future basis for network user-plane products with functions such as packet routing and packet processing, and is optimized for mobility functions. Based on the modular design of an embedded FlexiServer, tightly integrated with a highly efficient routing platform, it enables the independent scalability of packet routing and processing functions. FlexiGateway, with specially designed content-aware provisioning extensions, will gradually complete the implementation of the All-IP architecture.

In order to leverage industry innovation, Nokia's own strong R&D is in partnership with important industry players – allowing a focus on strong, new key competence areas. In addition, network operators expect continuously improving functionality, which is why Nokia FlexiFamily platforms are harnessing findings from the development and deployment of comparable DX 200-based circuit-switched networks. Based on a commitment to life-time maintenance and investment protection, FlexiFamily platforms are a solid foundation for All-IP Mobility Systems.