Symbian Foundation Mobile software set free

White paper

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Introduction

If the past is any guide, with the dramatic advances in the last decade, we can be sure that the next wave in mobile innovation will totally reinvent the Internet, mobility and computing to meet the needs of over four billion subscribers by the end of 2010.

The demand for converged mobile devices is accelerating. Research shows that every year people spend more and more time using their mobile device; browsing the Internet, playing games and music, and keeping in contact with the people who are important to them.

Furthermore, the next billion joining the global mobile conversation, as we move from three to four billion, will also change the terms of engagement dramatically. For many their mobile will be their first Internet experience, not just their first camera, or first music player, or first phone.

Open software is the basic building block for delivering this future; the enabler to meet the aspirations of billions and will bring a truly personal Internet experience, one that is always at hand.

A shared vision for converged mobile devices

To meet this future, Symbian OS, S60, UIQ and MOAP(S) unite to create an unparalleled open software platform for converged mobile devices, enabling the whole mobile ecosystem to quickly and easily innovate. The Symbian Foundation brings to life a shared industry vision creating the most proven, open and complete mobile software platform.

This vision is shared by many including AT&T, LG, Motorola, Nokia, NTT DOCOMO, Samsung Electronics, Sony Ericsson, STMicroelectronics, Texas Instruments and Vodafone; and we invite you to join us.

Royalty-free platform moving to open source

The Symbian Foundation platform will be available under a royalty-free license from this non-profit foundation. The Symbian Foundation will provide, manage and unify the platform for its members. The membership of the foundation is open to any organization, with the foundation's launch planned for the first half 2009. All contributed assets – Symbian OS, S60, UIQ and MOAP(S) – will be available under the foundation's royalty-free license on the foundation's launch. The foundation will provide one unified platform with one UI framework with first release expected in 2009.

The foundation is also committed to moving the platform to open source during the next two years and intends to release the platform under the Eclipse Public License. This will make the platform code available to all for free.

De facto standard at launch

Symbian OS is already the most advanced and widely used converged device platform with 60% market share for the 12 months to March 2008 (Source: Canalys). To date, there have been over 200 million Symbian based devices shipped, across 235 device models, available on over 250 operator networks.

This success has attracted the most innovative mobile developers and service providers from across the globe from Europe to Asia to America. Today there are over 4 million registered developers and tens of thousands of applications already available for the Symbian Foundation platform.

The fuel for innovation

The Symbian Foundation platform provides critical mass like no other, building on arguably the most proven mobile software platform and ecosystem. Through its openness and completeness the Symbian Foundation platform will fuel innovation and accelerate the availability of new services and Internet experiences on your mobile.

The platform offers exciting possibilities for the future but also for the present, as you can start developing today for the future, using the tools available today and reach a huge existing market.

The Symbian Foundation platform is the accelerant for innovation. It will bring growth to the mobile industry and create greater value for everyone - operators, developers, service providers, suppliers, manufacturers and consumers.

Most proven, open, complete mobile platform

The Symbian Foundation platform embraces and combines proven technologies and software assets to provide the most complete, and consistent mobile platform.

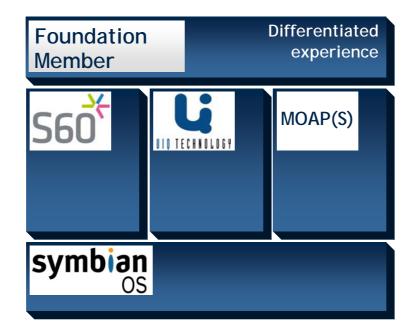
The initial contributed assets to the Symbian Foundation platform are:

- Symbian
- S60
- UIQ
- MOAP(S)

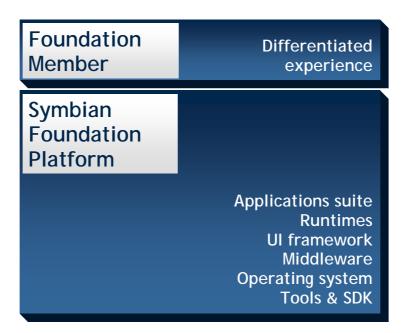
These software assets are to be contributed to the foundation by Fujitsu, Motorola, Nokia, NTT DOCOMO and Sony Ericsson along with related tools and documentation.

On launch of the foundation, which is expected in the first half of 2009, all contributed assets will be available under the foundation's royalty-free license. Device manufacturers will be shipping devices based on the foundation's assets from launch of the foundation.

A new platform is then to be formed from Symbian OS and S60 with selected UIQ and MOAP(S) technologies integrated.



The foundation will combine the contributed assets to offer one platform comprised of operating system (OS), middleware, user interface framework, runtimes and an applications suite, with the addition of a comprehensive set of tools and software development kit.



The first release of the unified Symbian Foundation platform is expected to be available during 2009. The platform will offer the means to build a complete mobile device while providing the tools to differentiate devices through tailoring of the user experience, applications and services. This will enable device manufacturers to create unique devices, based on a consistent and common platform, providing fuel and scale for the innovation of others.

Figure 1: Symbian Foundation assets to be unified to create one platform

Figure 2: One unified Symbian Foundation platform to be available in 2009

Backwards compatible

The Symbian Foundation platform will offer both exciting possibilities for the future but also compatibility with the past - to Symbian OS v9 and S60 3rd edition. This secures existing investments in the platform, in services and in applications. Furthermore, the platform will have one UI framework, ensuring the compatibility of services and applications.

Backward compatibility also means you can start developing today for the future using the tools available today – many available free – and reach a huge existing market with compatibility guaranteed for the future.

Open and independent foundation

An open, independent, not-for-profit institution, the Symbian Foundation, will be the driving force behind the platform.

Foundation is open to all

The foundation is open to all organizations. All members will be able to influence to the evolution of the foundation's platform by contributing to and participating in the foundation.

The members will direct both strategic and operational decisions of the foundation and its software platform through the foundation's board of directors, and via a number of foundation councils. All members will have the right to participate in working groups, to participate in annual member meetings, will have access to the plans and deliverables of the foundation software projects, and will be eligible for board and council seats.

Chartered for ecosystem benefit

The foundation software licensing model and governance has been selected to secure transparency, encourage contribution and maintain platform consistency. The foundation will promote collaboration, contributions and active participation.

Foundation membership agreement

To join the foundation you need to agree to the membership agreement and constitutions of the foundation. These legal documents provide the license to the foundation platform and regulate governance of the foundation. The constitution of the foundation ensures the rights of its members.

Figure 3: Membership rights and benefits

Symbian Foundation	Member right
Open to any interested organizations	Yes
Software platform available royalty free for product development from launch	Yes
Right to commercially distribute foundation code under license	Yes
Right to access and modify foundation source code, and contribute code to the foundation	Yes
Access to council meeting minutes, plans and deliverables of the foundation software projects	Yes
Right to participate in working groups	Yes
Right to participate in annual member meetings	Yes
Eligible for a board seat*	Yes
Eligible for council seats*	Yes
Size of annual membership fee**	\$1,500 USD

* Board and council sizes limited for operational efficiency

** Device manufacturers on the Board cover equally the foundation's operational expenses

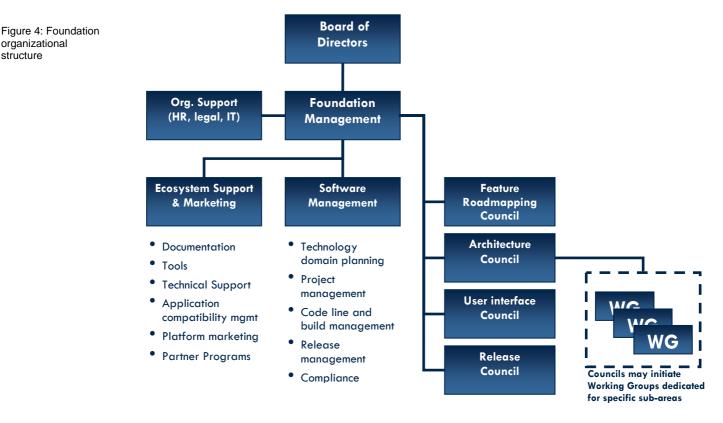
Foundation structure

The foundation will be governed by its Board of Directors. The board is to consist of representatives from the foundation members. Membership-based councils then drive the critical operative decisions:

- Feature Roadmapping Council will define the platform roadmap and releases, and initiate projects.
- Architecture Council will ensure that the foundation maintains one common platform.
- User Interface (UI) Council will approve UI fundamentals and define UI guidelines and requirements.
- Release Council will establish and coordinate releases.

The members of the foundation's Board of Directors will also have seats in each council, with additional seats in the councils available for other foundation members. The foundation will operate as a meritocracy. Device manufacturers will be eligible for seats based on the number of Symbian Foundation platform-based devices shipped, with the other board members selected by election and contribution. An independent committee will oversee the election process for the board of directors and for the councils. Only one seat will be available per organization on the board of directors and on each of the councils.

The initial board members will be AT&T, LG, Motorola, Nokia, NTT DOCOMO, Samsung Electronics, Sony Ericsson, STMicroelectronics, Texas Instruments and Vodafone.



The foundation's primary funding is to be provided by the device manufacturers with seats on the foundation's Board of Directors. All members will also pay an annual membership of US \$1,500. This will cover member administration and support.

The foundation's management and employees will be responsible for day-to-day management of the platform, for providing developer support and will endeavor to nurture the whole ecosystem.

Transparent platform

The foundation will manage the platform's development process. This process will ensure transparent decision-making and equal access to the software. All members will have the opportunity to contribute to and influence the foundation's platform.

The foundation will be responsible for managing the software roadmap and releasing the software platform, with the source code available to all foundation members. The development of the platform will be the responsibility of the foundation members, with the foundation coordinating development projects and managing the master code line.

The foundation software releases are to be planned in the Feature Roadmapping Council, then validated against the strategic platform architecture set by the Architecture Council, and approved by the Release Council. The process is to operate in a "time boxed" manner, i.e. schedule and quality override content in priority.

All foundation asset development is to be done in project mode by foundation members. The foundation's software organization will manage releases, ensure

integrity, and validate compliancy. Prioritization and scheduling of components is to be based on market impact and will be handled as per the foundation's governance principles.

Brand ensures compatibility

The foundation's brand will identify products based on the Symbian Foundation platform. The brand will only be available for use if a product shipped is compatible with foundation's platform. A suite of tools for testing compatibility will be provided by the foundation.

Foundation committed to open source

The foundation targets to make all assets available in open source by releasing meaningful packages of components. Selected components to be open sourced on launch.

The foundation will then work to an aggressive schedule to open source all the essential software platform components for building a mobile device. It is expected that this will be completed within the next two years, with the intent that the platform code will be licensed under the Eclipse Public License (EPL) 1.0.

Moving the platform to open source is aimed at bringing additional innovation to the platform and will engage an even broader community in its future development.

Building value for the whole ecosystem

The Symbian Foundation will deliver a consistent platform, as major device manufacturers are committed to adopting and ensuring the compatibility of the foundation's platform. Going forward, you will know that where you see the foundation's brand you will know there is compatibility.

This consistency and compatibility will enable the whole ecosystem, accelerate innovation, and increase the availability of third party services. Furthermore, the foundation's platform will preserve and build on existing investments in Symbian and S60.

Free and open for development

The Platform will be completely free and open to developers whether enthusiast, web designer, professional developer or service provider. Of course, membership is not required to develop services and applications on the platform.

The Symbian Foundation's developer program will provide a single point of access for developer support, providing a wide offering of tools and resources – most available free – including:

- Software Development Kits (SDK's)
- Documentation

- Sample code
- Knowledge base
- Application signing program
- Incident based technical support

Furthermore, the platform will embrace the runtime technologies already used by the developer community allowing for efficient use of existing assets and skills. The platform will support an extensive offering of development environments including native Symbian C++, POSIX C and C++, Python and Web runtime based on WebKit.

The foundation will also provide the integration for other commercial development environments including Java, Adobe FlashLite and Microsoft Silverlight enabling device manufacturers to integrate into their devices offering and further expand the possibilities for developers. Device manufacturer developer programs are to be aligned to foundation developer program and offer additional vendor specific support, for example, business development support.

Furthermore, you can already start developing today for the future using the tools available for Symbian and S60; reaching a huge existing market with compatibility for the future.

Clear benefits for the whole ecosystem

We believe that the Symbian Foundation offers a highly attractive open platform for all ecosystem partners, and will bring growth and opportunity for all.

For Operators the platform will ensure faster and more cost-efficient rollout of operator customized devices and services through the foundation's promise of compatibility and consistency. It will provide a variety of appealing devices, from multiple vendors, easily customizable to address the operator's needs.

Developers and Service Providers will easily be able to extend their innovations to mobile, reaching a fast growing, already large addressable market. The foundation's consistent platform will allow for cost-efficient development across a large addressable market, with free tools and support.

Hardware vendors will be able to more readily bring their innovations and chipsets to market. It will enable hardware vendors to reap the rewards of increased market potential with decreased design and integration investment.

Device manufacturers will gain costs savings through access to royalty free software while being able to create highly differentiated devices and gaining economies of scale from compatibility for their services and applications.

Furthermore, manufacturers, hardware vendors, service providers, developers and operators can preserve and build on their existing investments in Symbian OS, S60, UIQ and MOAP(S).

Symbian Foundation offers a highly attractive open platform for all ecosystem partners through greater scale, greater consistency and greater opportunity.

The open road

To achieve our shared vision there are a number of steps on the open road. The following highlights the key activities and timeline:

- A. Nokia to acquire Symbian Limited with closure expected during the second half of 2008, subject to customary closing conditions, including competition authority approvals. After the closing, all Symbian employees will become Nokia employees. Nokia will then contribute Symbian OS to the foundation through broad initial contribution license.
- B. Independent non-profit Symbian Foundation established, during the first half of 2009, to steer the joint development of software platform with Symbian, S60, UIQ and MOAP(S) assets contributed and merged to one platform with one UI framework.
- C. Symbian Foundation launched with all assets Symbian OS, S60, UIQ and MOAP(S) available under the royalty-free license to all foundation members expected launch during the first half of 2009.
- D. First complete unified Symbian Foundation platform release is expected to be available during the first half of 2009 to all foundation members.
- E. Platform assets made available as open source gradually over the next 2 years, with the intent to use the Eclipse Public License (EPL) 1.0, making the platform code available to all for free.

Join the foundation

Membership is open to all organizations. To express your interest in joining the Symbian Foundation please visit <u>www.symbianfoundation.org</u>.

We look forward to hearing from you.

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