1. Frequently Asked Questions

1.1. What is Tizen?
Tizen is a broadly supported industry effort to create and to grow a new, open and flexible mobile operating system. Its built-in flexibility empowers operators, OEMs and developers to create applications, services and business models that enhance their brand and meet the needs of a broad consumer base. As an open source software platform, Tizen is expected to be a fast, simple and affordable path to creating and supporting these new offerings, and is designed to make it easy to develop for a range of devices while still delivering superior performance.

1.2. Why did you choose the Tizen name? What does it mean?
Tizen (pronounced ti-zan) is a crisp, strong name that matches the scope and capabilities of this new open source operating system. The name was created by combining the connectivity of “tie,” the activity of “rise” and the meditative qualities of “Zen.” Together, the name represents an operating system that works with you and gives you the easiest access to your mobile life.

1.3. What is the overall value proposition of Tizen?
Tizen was created to provide:

- An open source platform that encourages community innovation and enables full flexibility in UX design and innovation;
- Independence from platform vendor service models and app stores so that OEMs and operators can create new applications, services and business models that are best suited for local demands, enhance their brand, support their long-term business objectives, and meet the needs of a broad consumer base;
- Superior standards-based HTML5 support, ensuring a robust crop of mobile apps and an optimal user experience on Tizen devices;
- A cross-device and cross-architecture solution for the development and deployment of services and applications across an array of consumer electronics devices.
1.4. **Is Tizen created for more than just smartphones?**

Yes, Tizen is an open source, standards-based, cross-architecture software platform for multiple categories initially focusing on smartphones, tablets, and automotive infotainment, with other consumer electronics devices envisioned moving forward.

1.5. **What makes Tizen different from other mobile platforms?**

Tizen is different because it is a broad industry effort to create a new mobile ecosystem that meets the needs of every player. Tizen was created as an open and flexible operating system that empowers operators, OEMs and developers to create new applications, services and business models that build their brand, support their long-term business success and meet the needs of a broad consumer base.

1.6. **Who are the members of the Tizen Association?**

Members of the Tizen Association represent every major sector of the mobility industry and every region of the world. Current members include operators, OEMs and computing leaders: Fujitsu, Huawei, Intel Corporation, KT, NEC CASIO Mobile Communications, NTT DOCOMO, Orange, Panasonic Mobile Communications, Samsung, SK Telecom, Sprint and Vodafone.

1.7. **What mobile web technologies does the Tizen platform support?**

Tizen supports HTML5, which is a key component in a set of standards-based “Open Web” APIs based upon W3C standards. JavaScript (for interactivity), XML, Ajax and CSS (for content styling) enable cross-OS, cross-platform mobile apps.

1.8. **What is the strategic significance of HTML5 support in Tizen?**

As we know today, a mobile ecosystem cannot thrive without a robust selection of mobile apps available to end users. To ensure this is the case, Tizen has embraced a standards-based HTML5 development environment which will speed app delivery across multiple operating system platforms and devices. Developers will be able to easily and rapidly create and deliver applications while also taking advantage of native platform capabilities. HTML5 promises to remove barriers for mobile app developers by utilizing a common framework that is readily accessible and recognized around the world. Any device with any mobile operating system which supports an HTML5 runtime should be able to run an HTML5 app, similar to how website content can be displayed on any number of web browsers. The ability for developers to “write once/run on many devices” is expected to create a robust selection of mobile apps which Tizen can leverage, rather than requiring developers to create native apps specifically for Tizen devices.
1.9. Why is native app development supported?
We believe that by offering a choice between HTML5 and native APIs, developers can take advantage of prior investments in native code as well as many existing open source projects written in C/C++.

1.10. How will Tizen be different from Android? iOS? Windows Phone?
Tizen is created with the built-in flexibility to empower OEMs, operators and developers to create new applications, services and business models that build their brand, support their long-term business objectives and allow them to meet the needs of a broad consumer base.

1.11. What is new in Tizen 2.0?
Tizen 2.0 introduces enhancements in a number of areas including hybrid application (native) support, additional web APIs, new middleware, and new built-in application features.

• **Hybrid Application Support:** Developers can now create hybrid applications by packaging native code together with a Web application. This allows developers to create rich HTML5 applications with responsive user experiences while also taking advantage of their prior investments in native code.

• **Middleware Enhancements:** Tizen 2.0 provides many middleware enhancements, such as a new open source Content Screening Framework (CSF) to enable better integration between the operating system and any vendor’s anti-virus software, and a new open source OMA device management client for configuring and provisioning applications on Tizen devices.

• **New Built-in Application Features:** Highlights in Tizen 2.0 include the addition of exposure and white balance for the built-in Camera app, drawing support for the Memos app, and call rejection support for the Dialer app.

1.12. Complete list of Tizen 2.0 features:

• **Built-in Application Highlights**
  
  o Home/Lock Screen with a notification area (pull-down menu), movable icons, customizable wallpapers and support for up to nine panels.
  
  o Contacts application integrated with other applications such as dialer and email. Support for contact sharing over Bluetooth, SMS and email.
  
  o Dialer can initiate a call from the dial pad, contacts, or history. Dialer also supports call barring/rejection (with message back to caller), speed-dial, multiparty call, DTMF and USSD.
  
  o Messaging support for SMS and MMS. Common email protocols and spam filtering.
  
  o High-performance Web Browser with hardware-accelerated CSS.
  
  o Leading HTML5 compliance, customizable security settings, and integrated media support.
Front/rear Camera support for video (MPEG4, AAC) and picture (JPEG/EXiF) recording in multiple orientations. Configurable exposure, white balance, guidelines and storage selection.

Search across contacts, mails, calendar, applications and media metadata.

Calculator with standard functions (portrait) and advanced functions (landscape).

Calendar with integrated To-Do list, year/month/week/day/list view, links to email and contacts, and vCal import/export support.

**Clock** with alarm, timer/stopwatch, support for multiple world clocks and automatic/manual location setup.

Text and draw **Memos**. URL links and phone numbers are clickable. Memos can be transferred via email/message.

**Gallery** handles both videos and pictures, and supports tags, favorites, sharing, basic manipulation (crop/rotate/zoom), slideshow.

**Music Player** has views for album, artist, composer and genre. Playlist support with automatic most played and recently played/added lists.

**Internationalization** support for 43 display languages and 36 input languages. Replaceable keyboard.

• **Platform Core Highlights**

  o Web Runtime: Webkit 2 based runtime with support for WebGL, H/W accelerated CSS3 and 2D Canvas. jQuery/jQuery Mobile UI framework, local storage, compliant with latest HTML5 specifications plus Tizen Device API support.

  o Multimedia: Support for the most common audio/video codecs such as MPEG4, H.264 and MP3, as well as containers, such as MP4, AVI, WAV, etc. OpenGL ES 1.1 and 2.0 support, and common DRM protocols such as OMA DRM and A2DP.

  o Messaging: Basic SMS, MMS and email functionality, including push notifications.

  o Location: GPS, WPS and CPS location support. Geocoding, POI and route search feature support.

  o Security: SMACK-based access control, DRM protection for content and applications. Secure storage for confidential data. Cryptography and SSL support based on OpenSSL.


  o Connectivity: Bluetooth, tethering, NFC and WiFi connectivity.

  o **Telephony**: Radio interface layer to modem software, call management and emergency services.
- **Personal Information management**: Create/Retrieve/Update/Delete contacts, vCard 3.0 and vCal 1.0 support.
- **App Lifecycle management**: Application switching, task killer and application launch control.
- **SDK and Developer**: Eclipse SDK, Emulator and web simulator, USB debug mode.

  - Developer API Highlights
    - **Web APIs**: HTML5/W3C APIs, Web UI Framework (full screen, multi-windows, built-in widgets), Web Runtime (native/hybrid support, device API access), Tizen APIs.
    - **Native APIs**: Similar functionality to web apps. 2D/3D graphics.

1.13. **Will there be an app store for Tizen and if so, when will it launch?**

   Yes, there will be a Tizen Store that will launch with the first Tizen device. Outreach to developers has already begun and we expect thousands of Tizen applications to be ready when the Tizen Store launches. Additional details will be available at a later time.

2. **Glossary**

2.1. **Apache Cordova**

   Uniform open source set of device APIs used to create cross-platform mobile applications.

2.2. **Call Barring**

   Restriction of certain types of calls. (For example, international calls.)

2.3. **Cellular positioning system (CPS)**

   Location identification based on cellular towers.

2.4. **Dual-tone Multi-frequency (DTMF)**

   Method of telecommunication signaling over analog lines (For example, touch tone.)

2.5. **Enlightenment Foundation Libraries (EFL)**

   A collection of open source graphic libraries used to quickly and easily develop graphical applications.

2.6. **jQuery**

   Browser-independent open source JavaScript library designed to simplify the scripting of HTML.
2.7. **jQuery Mobile**
   An HTML5-based, touch-optimized open source web framework based on jQuery that allows for rapid and consistent graphical user interface design.

2.8. **Multimedia Messaging Service (MMS)**
   Message that can contain multimedia content such as pictures or video.

2.9. **Open Mobile Alliance Device Management (OMA DM)**
   Specification designed for the management of mobile device to allow a remote administrator to remotely maintain and report configuration, diagnose problems, and install/update/manage software on a device.

2.10. **Open Mobile Alliance Digital Rights Management (OMA DRM)**
   System designed to control and enforce the distribution rights of media content.

2.11. **POI**
   Point of interest

2.12. **Tizen Hybrid Package**
   A Tizen application package consisting of both a web application and a native service application.

2.13. **Tizen Native Service Application**
   A Tizen native application which has no graphical user interface.

2.14. **Unstructured Supplementary Service Data (USSD)**
   Protocol used in GSM networks to communicate with the device in real-time. USSD can be used for WAP browsing, prepaid callback service, mobile-money services, location-based content services, menu-based information services, and as part of configuring the phone on the network.

2.15. **WiFi Positioning System (WPS)**
   Location identification based on WiFi network.