“PIAZZA”
The on-line Community Tool for COMSOC and Sister Societies Members

Objectives and Specifications
Document Objectives

• This document aims at outlining the Specs for an on-line Community Support tool[s] to be made available to COMSOC Members and to Members of COMSOC Sister Societies as a way to leverage [on] the know how, both technical and location specific, of our members in favor of each one of them.

• These Specs shall be the base firstly to evaluate the cost for building such a tool and the cost for its up-keeping; secondly for evaluating the cost benefit [by]*for* the BoG to move ahead in the implementation phase

• These Specs are also intended as a document to be socialized with COMSOC Sister Societies to strengthen the ties with them and [have]*determine* their commitment in the launch of the project.
“Piazza” Objectives

- **Piazza**, the *public* square – the agorà, aims at providing an easy to use, highly visible tool for creating an online community for COMSOC and Sister Societies members.

- Societies, such as COMSOC, are created out of the acknowledgment of the existence of a common interest naturally leading to an aggregation of people. So far most of the services provided are based on a client server model, ie. the Society takes care of delivering valued services to its members, such as publications, organizing conferences, leveraging on the market space created by the number of members to set up deals with some company to provide benefits to members (better insurance, discounted travel…)

  The advance of telecommunications allows the setting up of a communication infrastructure among members to promote a peer to peer model where every member has direct access and can share info with other members thus leveraging individually from the wealth represented by the sheer number of members. The Society in this case acts as a facilitator.

- The **Objective of Piazza** is to create a **communication fabric** that seamlessly connects all members and support communities within the community in a dynamic fashion: this is [both]*concurrently* a **service to the members**, a **retaining factor**, a **marketing tool**, a **profiling tool**, *and* a **point of convergence** for other tools.
“Piazza”: A communication Fabric

- **Piazza** shall become a *communication fabric* seamlessly connecting members on an anonymous base. The clustering, and the communications, is set up based on specific interest and on location. A member may be seeking to talk to a member who is knowledgeable on ADSL dissemination in Korea and Piazza can immediately link him to such members. At a glance one may see what members, having that specific expertise, are present in a given area of interest (e.g. Korea), and depending on their status (Skype like: on-line, on line but not available, off line) can set up a communication, via VoIP, chat, email, bulleting board.

- Communications can be either through private channels or can be open, visible and shareable. **Piazza** shall support the various kinds of communications.

- Ideally, every member will automatically open **Piazza** any time she is on-line and as such she becomes visible to the community.
“Piazza”: Service to Members

• **Piazza** is a platform working as an aggregator of services. It supports service providers with display of geographical maps showing the location of members based on filters related to interest and status (present availability online, willingness to talk now or later, language…).

• **Piazza** has its own services, such as members lists (ensuring anonymity where required), provisions to create specific aggregation (e.g. setting up of clustering based on interest…), taxonomy to identify technologies and interests thus facilitating aggregation, taxonomy oriented search engines…

• **Piazza** can be used as an annotation – push board where a member can qualify her interest and require to be updated when something of relevance is going on, via e-mail and Podcast. This feature can be used by third parties (based on agreement and possibly fees) to provide information.

• **Piazza** offers to members the possibility to be at the center of the Agorà and communicate – shout- their ideas to a world of peers. Tools like bulletin boards, discussion areas, conference calls (à la Skype with up to 100 channels), individual Podcast creation…
“Piazza”: Retaining Factor

- **Piazza** can act as a strong retainer for members both in terms of value perceived by being part of a community and as the need to leverage on the investment in time and information. Indeed the value of being part of a Community is greatly increased by an active participation. This requires investment in time and focus and over time creates a capital (profiling, history..) that becomes a strong sticky factor.

- **Services** designed for Piazza shall be designed having in mind the accrual of value from the interaction of the user so that over time it will become more and more inconvenient to abandon Piazza for a different system (that so far is non existent in our area).

- **Members** can benefit from other members’ know how and also from other members (and clustering of members) results. These are visible in their entirety only to members and their value can only be exploited by them. Because of this differentiation in visibility is very important.
“Piazza”: Marketing Tool

- **Piazza** can be a marketing tool since it creates over time a segmentation of the members market. By monitoring ongoing discussion, clusters being created and their activity it becomes possible to assess how interest shifts over time.
- **Piazza** can be used by TCs and Mkt directors to propose straw documents on technology and see how the community reacts.
- **Piazza** can be used by conference organizers to generate interest in a conference program by initiating discussion on the conference themes, involving authors to socialize their main points and stimulate discussion before the conference. After the conference Piazza can become the place for follow up discussion, to keep alive clusters that have been formed at the conference and to set the base for attendance to the next conference. Conference participants can automatically be listed as a cluster with all the visualization possibilities and communications capabilities offered by Piazza. The access to other parts of Piazza can be restricted if they are not COMSOC or Sister Society members with the online provision of becoming members and thus being granted full access.
“Piazza”: *Interest* Profiling Tool

- **Piazza** offers an effective segmentation of interest facility to members [for the members]. The cluster of interest is created by members potentially in three ways:
  - by accepting [to have] the information provided at membership renewal to become part of their profile used by Piazza to filter and display (always in an anonymous way)
  - By [creating an] updating their profile in Piazza, at any time
  - By accepting that Piazza monitors their activity and [constantly] *automatically* updates their profile

- *Interest* **Profile** is only used to members’ advantage, it is not disclosed explicitly, nor *can* anyone but the member [can] access to the profile. The advantage for the member is that based on the profile Piazza can automatically insert the member in clusters, can push information, *and* can ease linking among members.
“Piazza”: Point of Convergence

- **Piazza** can become a point of convergence for other COMSOC, IEEE and Sister Society system by providing them with a place to be visible and APIs to leverage on geographical and interest information. Furthermore it makes available the clustering and communications facilities.
  - IEL can be one of such system making it possible to link keywords in paper with taxonomy and with members’ interest. Piazza can also help in establishing communications with authors
  - FISTERA tool, mapping and road-mapping technology evolution and their application in various geographical areas is another of such systems that be be be integrated.
“Piazza”: Revenue Generation?

• **Piazza** can become a revenue generator if it is decided to exploit its market segmentation capability to funnel advertisement.
  – Advertisement can be funneled from existing channels (e.g. Comm Mag) indicating to advertisers this extra distribution media to increase their contact value, plus a fee per click through
  – New advertisement can be sought, either specific or via Google engine getting a revenue out of them
  – Advertisement can take the form of libraries and utilities made available at no cost through Piazza.

• **Piazza** can become a place to sell services and products provided by third parties. The value proposition to our members can be the one of getting a discounted price (and in that case this should be restricted to members, in some high cost packages it may even be more convenient to get a membership just to be able to get the discounted price); the value proposition to the product/service provider is the one of market segmentation. Geographical, interest and aggregation functionalities can be made available at a fee to companies wishing to sell products and services via Piazza with a strict control over what is being offered and the value proposition to our members, that in turns become the added value to the company wishing to sell on Piazza. **Do notice the strong difference** between funneling advertisement (basically no control on the value of what is being advertised with the exception of the relevance to the cluster) and the product offering that is somewhat rubber stamped.
This part outlines the Specifications. It is not, yet, a fixed Specifications, rather a proposal that tries to shape the requirements and objectives described in the previous section in a interface oriented description. As such it is the base for a discussion with the IT department that shall propose any changes that are deemed appropriate to limit cost, expedite implementation, better the usability, align the interface to already established criteria adopted in IEEE Portal. Also, it is important to come up with a roadmap for implementation that can identify subsequent releases and the functionality provided. This specs does not include the specification on requirements for the upkeeping and management. These are obviously essential but it is felt that they will be greatly influenced by the type of architecture and implementation solution adopted and as such they have to be defined in parallel with the consolidation of the specification. The bottom line, of course, is to satisfy the requirements.
SPECs - Timeline

• The draft was submitted May 15th to David Avarez.
• A conference was hold to identify gaps and open issues so that a first presentation can be given at the BoG meeting in Istanbul. Action bullets identified:
  - discuss with IEEE to single out what can be reused of the [https://www.ieeecommunities.org/](https://www.ieeecommunities.org/) (doubts on stability of the present offering)
  - assess if it is possible to contribute and influence choices of IEEE in the area of community support
  - look with IEEE policy – legal dept if it is possible to use Google, Frappr and the like in our Piazza…
• Based on the answer to the above points prepare an RFP and evaluate cost. It is not possible to have the development “in house”
SPECs - Timeline

- Specs for first release frozen middle of July.
- Draft interface available for OpCom, end of September for feedback
- Approval of the proposal and budget at the NY Opcom in Sept-, at least for the first release.
- Update of the membership forms for 2007 to include permission to use profile date
- Involvement of some Sister Societies right from the first part of the project
- Running prototype to be demonstrated at BoG meeting in San Francisco end of November
- Announcement of Piazza in the December Comm. Mag
- January 1st, activation on line of the first release.
SPECs – Data Input

- Visualization data are retrieved through Google Earth API up to the best zooming possibilities. This shall be a continuous process so that as more details is provided via Google Earth more details can be displayed in Piazza.
- Localization data are retrieved through member provided information on the membership enrollment-renewal form. There may be the opt in option, rather than the opt out. In this case members are requested to log in in Piazza and provide their location information. Location information shall in any case be updatable by the member directly on Piazza. This information does not need to be matched by the member file in IEEE-COMSOC since one may decide to be localized at a different location than the mailing address.
- Members identity, password, area of interests can be directly derived from the renewal/enrolment form or can be requested at the first visit to Piazza. It is anyhow possible to update this information on Piazza in the members’ area.
- Members subscription to services (Podcast, push mail…) takes place in the members’ area or through subscribe button once he is registered.
- DBs updated by DB managers or users according to specific req.
The basic interface can be modeled along the lines of Frappr (www.frappr.com) with some clear connotation of being a COMSOC web site. The opening screen shall include the login. This can be done as a member with the IEEE No and password (do we require a different password not to tamper with the IEEE one?) or Sister Society identification or as a guest. Guest have to register providing their email. They cannot be included in the display, nor can communicate with members.

Menus shall include:

- Member profile update: here it is possible to change information related to the member and permission/anonymity requirements. Mail to notify updates and request for confirmation.
- Community listing and description. A pull down window lists all cluster active. By selecting one a description of what that cluster is about appears and okying it one is taken to the cluster area, still displayed in geographical terms.
- Search area: by inputting a search string a number of clusters are presented meeting the search criteria. Search can be done according to area of interest, technology, services, and filtered according to geography.
- Services, with a distinction between COMSOC services and third party services
- Technology Watch
**SPECs – Interface**

**Main screen**

- **Communities**
  - Pull down menu with list and others

- **Technology Watch**
  - Events geo localised
  - Pull down menu for time window
  - Includes conf., DLT, university lectures, BoG, SS, TC meetings
  - Direct link to enroll

- **GeoMap with Chapters and Sister Societies**
  - Location
  - Clicking on a marker provides information
  - Details and connection capabilities

- **Log-in and registration**
  - Cookies for auto log in

- **Social Network**
  - Comm.name

- **Rolling News**
  - ADS space
This page appears after log in. It is centered on the member's location. It highlights
- Events occurring in the member's area -1000 miles radius, related to Comsoc, including DLT's in the next 6 months
- Events everywhere in the world in the coming 6 months relating to the member's interest

All information is filtered based on member's profile.

The menu structure remains the same.

The map shows her social network in the vicinity.

Option to color code parameters.
SPECs – Interface
Community Area

- This is the core of the Piazza. It supports creation and participation in Social Networks.
- A Community is characterized by an objective and a leader taking responsibility for the cluster content. Any member can create a cluster and can participate in a cluster.
- The geomap represents location of members of the community with icons to determine their status.
- A window contains pending questions submitted and not withdrawn. By clicking on one communications is established through the means chosen by the responder.
- Community-related ongoing Comm. are shown in a window.
- Mechanisms for grading members based on their comments and feedback of interest –eBay like
SPECs – Interface
Conference Area

• This area is customized to fit each Conference, however it provides a general COMSOC look and feel.
• It contains:
  – Log in for people who registered for the Conference (both for physically or remote attendance). These are the people who paid for the registration (includes complimentary registration)
  – Log in for people with an interest in the Conference. Access to content is limited
  – Pre-conference discussion, papers outline, direct link to authors
  – Post conference discussion structured in sections, including access to papers, recordings, summary of sessions, Q&A
  – Geo-distribution of attendees with profiling based on a voluntary fill in of information (what sessions have been attended, technical interests…). This information goes into the member’s profile and creates a sort of certification trail
  – Communications support for remote attendance with or without registration (Log in is always required)
SPECs – Communication Services

• A viewer can establish contact with any of the members identified in the geographical map.
• Placing the mouse over a marker shows the related information, including the status (on-line, unwilling to accept voice call, …)
• Clicking on the name (can be anonymous) engage in a communication:
  – Mail sending
  – VoIP
  – Chat request
• Clicking on an ongoing communication sends a message to all those engaged and opens up a channel to participate
• Facilities for creating chat room characterized by a topic. Both synchronous and asynchronous communications supported
• Signal of contiguity among communications going on
• Communications can linger into a communication space, acting as a bulletin board.
• Facilities to connect to an event – possibility to charge for access
• Facilities for subscription to information push community related
SPECs – Technology Watch

- Service based on the Fistera Data Base
- Geo-representation technology maps to be created accessing data in the DB
- Data Base and Tools for creating and viewing object by Telecom Italia
- Support for mailing list and information push
The tool’s facilities are to be maintained by the IT dept.

Tuning of functionalities and new functions goes through the BoG for approval whenever budget is required. The BoG appoints a volunteer as the reference point for relation with the IT and for proposal of any change. Her name goes into the main page of PIAZZA so that users’ comments can be funneled to her.

Every Community has a reference person who has responsibility for the content and is asked to report over a 6 months period on usage, issues, and propose improvements to the volunteer appointed for PIAZZA.

The Technology Watch is maintained by Telecom Italia through 2007, thereafter the BoG will decide how to continue.

Each Conference area content is maintained by a person appointed by the Technical Committee of that Conference.

Profiling upkeeping is every member responsibility. IT dept provides an interface to help in resolving problems experienced by the members. IT dept ensures the usual privacy guarantee.