

- (1) What use case and scenario in your area would you consider the most appropriate and representative one for large-scale experimentation with the Future Internet platform to be built starting from 2013 (please refer to the documents referred to on the above websites for inspiration)?

The Web was originally designed for accessing contents in the Internet. What started just as an instrument for the network has become the main protagonist in our relation to the information world. The huge amount of information available and the limited processing capability (human and computing machine) is limiting its usefulness and creating big bottlenecks.

Social networks will be playing a more and more important role in the future. To enlarge these content networks with new services and data they have to enrich with commercial and government content, known as social network municipality and social network marketplaces. One big challenge is to combine user generated content with these new services and deliver the user with the content which is important and useful for him. So the content providers have to find out what users are interested in and how to push the information to them. The project will be facing three main aspects in the usage area “Content” of the EU-FII

- Content generation,
- Content storage and
- Content delivery

To give an example:

Social networks could be expanded with local marketplaces, e.g. for real estates or yellow pages. These new content could come from local publishing companies or newspapers holding that information for their print media. In a social network the user is widely to be localized due to his profile information and network activities. Search algorithms could find those network activities and match these information with metadata for user preferences. Lets say a user likes Italian food and is on his holidays or “new in town” not knowing where to go for lunch. The network will give him this information with the next Italian restaurant in his area including a road map based on his localized position. (At this point a mobile connection is needed.)

The information the user is now using can enlarge by himself – like how was the food or maybe he find a faster way. The user shares these information with the network generating new content which has to be provided. Intelligent applications can now use the new data to create new roadmaps publishing to the network. Even the creation of new types of information is possible. So could publishing companies now access these new information and divert it for offline media personalized for their readers.

Building such a scenario in a regional content would be a large project due to the complexity of the involved systems and business processes leading into new processes inside the public and the commercial sector as well to be researched. New interfaces have to set up and a new community approach has to be implemented.

The output of this scenario will result in intelligent browsing applications that would extract the relevant semantic information and present it to the user. It is also crucial to be able to estimate and measure user attention and react accordingly. The user experience is the most important thing that we have to consider in the future of internet. We have lots of contents and we need to show them in a very limited space. So the user has to become a part of the retrieval system.

- (2) What innovative Internet functionality and technologies would you consider important for your suggested use case and scenario (e.g. context awareness, sensor networks, advanced real

time processing capabilities handling huge volume of data, ad hoc service composition and mash-up, managed broadband connectivity and services, embedded media support for interfaces easing the interpretation of processed contextual data, etc.)?)

There are actually several major technology trends that are about to reach a new level of maturity at the same time. An important aspect that characterizes services offered by the Internet is the availability, meaning not only the physical availability like hardware or software availability. The availability of the right content an user demands is meant as well. The contents has to be accessible at any time on any place. As the infrastructure plays an increasing role, its resiliency is an important challenge to overcome. From this perspective, the following issues shall be addressed:

- Advanced real time processing capabilities handling huge volume of data
  - Self-healing mechanism
  - Mobile network communication
  - Global access to the network capacity and high availability for operational continuity
  - Semantic web
  - Intelligent applications (for direct interconnectivity between different networks and applications)
  - Content searchability and seamless localisation
  - Integration of different media formats (online and offline)
    - Handling new types of content and bridging the gap between them
- (3) Which of the identified functionalities would you expect the Future Internet core technology platform to deliver to support your and other usage area scenarios?

The main focus for delivering the content in our scenario will facing these core technologies:

- (a) Wireless broadband and optical networks
  - (b) Cognitive and opportunistic networking
  - (c) Virtual and augmented reality
  - (d) Semantic web and applications
  - (e) Social networks (web 3.0)
- (4) What kind of experimentation environment would you consider necessary for broad large scale testing of the platform to be developed in your use area? What would be needed to experiment new services and applications cutting across use areas (services and application mash-up) and building a new services and application ecosystem around the prototype implementations of the platform?

Since this scenario will produce and has to handle a large amount of data a large broadband network and connectivity to wireless networks will be needed to ensure the data access. The integration of a

social network community is needed to. New business processes for the public sector and the commercial sector as well have to be developed, implemented and researched

- (5) How do you see the potential role of your organisation in the FI-PPP, in the context of Usage areas taking a prominent role in the Initiative, to ensure an appropriate application driven approach?

Top21 and Bechtle Verlag build up a joint venture with experiences in public sector projects for large e-government projects with a regional focus we can push the EU-FII idea in our environment. As a local publishing and media company Bechtle Verlag could push the project approach in the local area. Top21 as a software company can handle large development projects. We see ourselves as a project coordinator and implementation partner in a SME's environment.