



*Integrated Networks for Seamless
and Transparent Service Discovery*

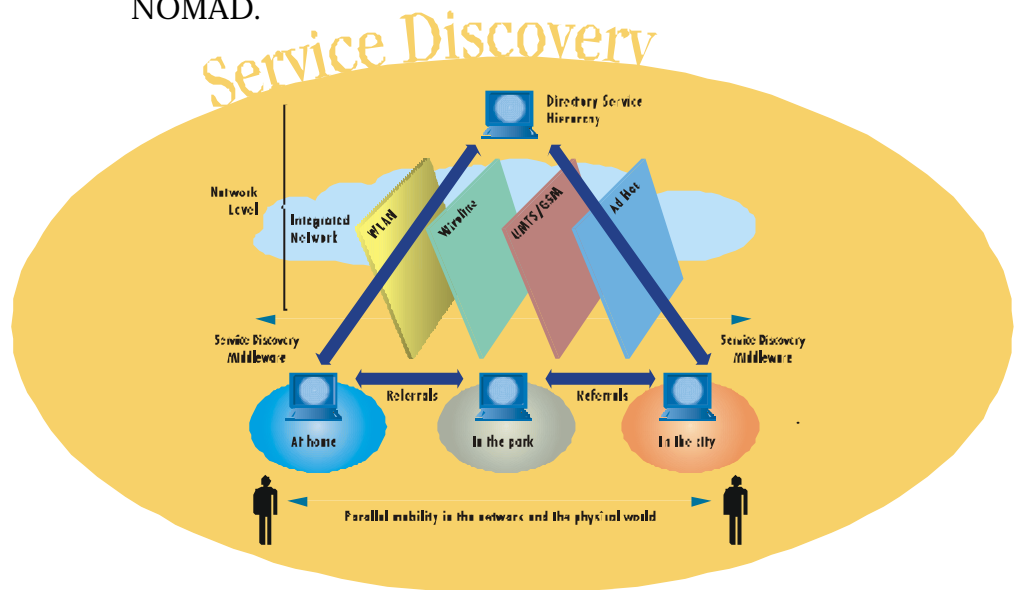
Newsletter 2/02

17 SEPTEMBER, 2002

NOMAD IS AN R&D PROJECT IN THE IST PROGRAMME FUNDED BY THE EUROPEAN COMMISSION. THE PROJECT COMMENCED ON THE 1ST OF JANUARY 2002 AND HAS A DURATION OF 30 MONTHS.

NOMAD Objectives

The main objective of NOMAD is to develop and demonstrate a middleware capable of seamlessly integrating available and future heterogeneous and homogenous network technologies (i.e. UMTS, HiperLAN2), as well as Internet-compatible, multi-hop ad-hoc networks into a single integrated network platform. Highly innovative technologies, like mobility between devices and new algorithms for parallel usage of multiple access interfaces, will be an essential part of NOMAD.



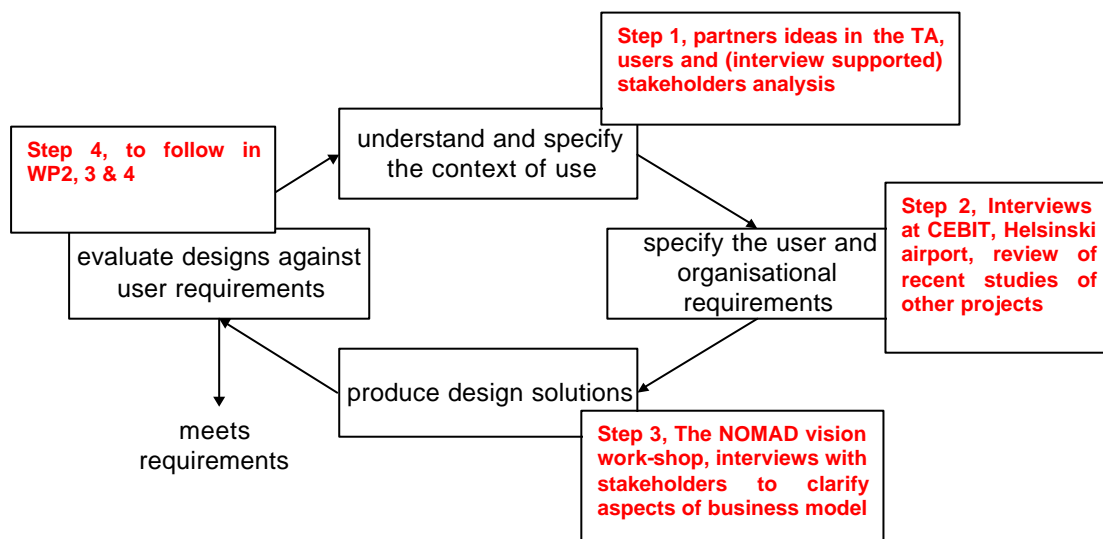
Further, NOMAD will support transparent service discovery and provision over integrated networks by the means of an intelligent service location and configuration middleware mechanism. It will enable users to locate resources and services within their physical and network environment regardless of the underlying network technology. Special focus of the service discovery process will be the integration of user profiles and positioning systems information.



Current Status

During the first 6 months of the project, a user requirements survey was carried out. Also the trial requirements for the first NOMAD pilots were defined. This work was carried out within Work Package 1, and the results are reported in two Deliverables: D1.1 Report on User Requirements Analysis and D1.3 Trial Requirements. Furthermore, a market and business model survey was carried out in the context of D1.2.

The objective of the user requirement survey was to define the user groups of NOMAD technology, to produce an insight into the business processes and to identify the requirements of the users of the NOMAD platform. The NOMAD user requirements survey is following a generic methodological approach based on ISO standard for system “user centred” design.



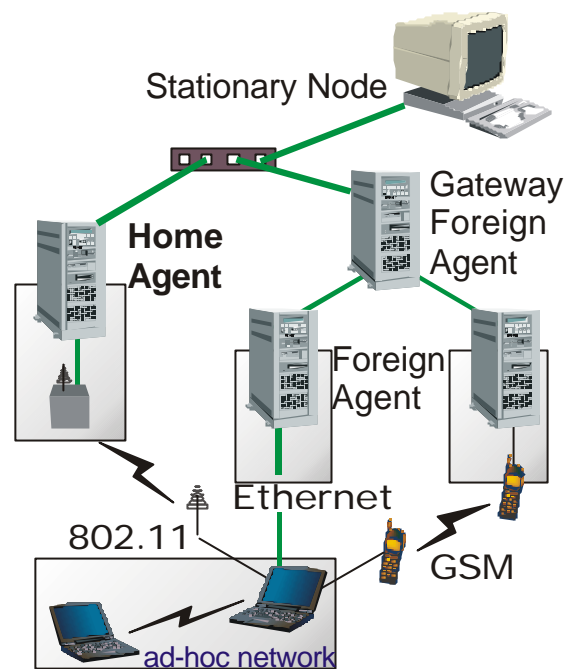
The findings of the NOMAD’s user requirements survey are derived from reviewing results of existing studies, surveys and interviews of end-users, insights from stakeholders’ interviews and a “vision” work-shop organised during the second plenary meeting of the consortium

The key findings of the user requirements survey can be summarised as follows:

- The requirements from the side of end-users are primarily related to usability, lifestyle, privacy and security & possibility to make shopping in the Web.
- Stakeholders (participating in the project as well as parties interviewed) actually confirmed our original approach on system concept and gave us a chance to further refine NOMAD design choices.
- The NOMAD project findings are quite similar with results from other projects in this area of 3G/4G technologies. This fact can be interpreted as a further proof of the validity of our findings. In fact we note that the studies validate each other's results so it might be proven useful, for other projects in the domain, to consider and utilise our findings.

After working out the user requirements and different usage scenarios, the NOMAD consortium defined two possible trials one in Bremen and one in Basel. The methodology used for the definition of these activities is based on carefully chosen scenarios that include all aspects of the research and development conducted within NOMAD. The requirements derived from the defined scenarios are then processed and elaborated in order to produce a superset of the technical features that need to be taken into account during the aforementioned demonstrations and to ensure the completeness of the proposed activities.

The pilots in Bremen and Basel will both offer integrated platform functionality, one based on IPv4 and the other on IPv6. Service Discovery will be demonstrated on both (subject to availability of IPv6 compliant software) and if possible also across both.



Afterwards, an outlook of the state of the art & the market environment was provided. Issues relevant to a “Wireless World” vision based on the current work of the Wireless World Research Forum (WWRF) are introduced. Further, the evolving value chain in mobile communications is described, the key market players and presents proposals on business modelling are identified. Finally a proposal, based on an assessment of the aforementioned by the NOMAD partners during an in depth discussion of the issues that took place at Helsinki, includes the business model to be followed by NOMAD (organisation, anticipated products and services). This model will be the basis for the financial study that will be conducted as part of the WP6 activities of the project (dissemination and exploitation planning) to explore the economical prospects of the NOMAD technology.

Event Calendar

The second NOMAD plenary meeting combined with the VISION workshop took place on 22-24 April, 2002, at OTEC premises. The third plenary meeting of NOMAD took place on 10-12 June, at HUT Premises, where Market & Business Model and system conception issues were discussed thoroughly. Next Meeting will be held on 2nd October in Bremen, Germany.

