

5G: European Roadmap, Global Impact



Tekes

12 - 15 June 2017

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Exhibition & Demonstration Proposal

This document contains a template for all the information relevant to each Exhibition & Demonstration booth to be organised within EuCNC 2017. The terms for organising an Exhibition & Demonstration booth, as well as the items for the evaluation of proposals, are available at the conference website, under “Exhibitors/Call for Exhibitors (Demos)” (<http://www.eucnc.eu/?q=node/84>). If the proposal is accepted, this text (the public information in it) will be used to advertise the Exhibition & Demonstration in the conference website.

The proposal should be submitted by the deadline, 2017 April 10th, to eucnc-exhibition@ee.oulu.fi. The name of the file should be the Exhibition & Demonstration title (abbreviated, if necessary).

Proposer's Name	Anastasius Gavras, Eurescom GmbH
Proposer's Institution	Eurescom GmbH
Billing Information (address)	reTHINK project c/o Eurescom GmbH, Wieblingen Weg 19/4, 69123 Heidelberg, Germany
Proposer's Email	gavras@eurescom.eu
Proposer's Phone Number	+49 6221 989232, +49 171 2861823
Proposer's CV (text up to 300 words)	Anastasius Gavras (male) has more than 20 years of professional experience in academic and industry research. He joined Eurescom, the leading organisation for managing collaborative R&D in telecommunications, more than 12 years ago as programme manager, focusing on the areas of management of networks & systems, security and middleware. In these areas he has managed a large number of studies and projects on topics which are of concern to the Eurescom member community of European telecom network operators and the European telecom industry at large. He has served as coordinator of several RTD projects under the European

	<p>framework programmes and has experience in standardisation among others in OMG and ITU-T for which he has served as rapporteur.</p> <p>His current interests are large scale testbed for enabling experimentation in 5G and Future Internet technologies and systems among others in the context of the 5G-PPP and the FI-PPP. In the context of the FI-PPP he is the project co-ordinator of an early trial project in the health sector. He is interested in innovation on top of 5G infrastructures and Future Internet platforms and the evolution of the networks in general. He is a steering board member of the FI-PPP and is actively involved from their inception, both in the Future Internet Assembly (FIA) and the Future Internet Research and Experimentation (FIRE) initiative. He is currently the co-ordinator of the project reTHINK (https://rethink-project.eu) in the area of Future Internet Architectures. He is author or co-author of several papers and articles in the area and is co-editor of all four FIA books. He is member of the editorial board of the Eurescom mess@ge magazine and has authored several articles for the magazine, typically with a techno-socio-economic dimension.</p>
<p>Project (indicate the project, if the proposal is associate to one)</p>	<p>reTHINK: Trustful hyper-linked entities in dynamic networks</p>
<p>Exhibition Title</p>	<p>Cloud communication framework</p>
<p>Motivation and Background (describe the motivation and background for the technologies and/or applications being demonstrated, up to 300 words)</p>	<p>reTHINK proposes a cloud communication framework that introduces interoperability by design, decentralised service delivery and reclaims user control over its data and privacy. It transforms standard telecommunication enabler technologies, such as privacy, identity assertion and Quality of Service. reTHINK embraces hybrid service concepts for communication between humans and objects. It retains the data sovereignty with the user by decoupling identity and service.</p> <p>reTHINK considers the interests of several stakeholders and enables new operation and business models by disrupting established communications business models and markets and potentially also the ones of the current OTTs. The concepts can be applied in most vertical markets such as in Industry 4.0, enabling convergence of service domains, as well as in future dynamic service environments for example in autonomous vehicles.</p>

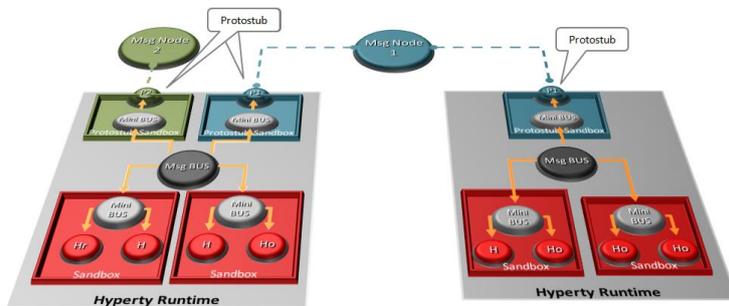
Objective

(describe the objective of the exhibition, up to 300 words)

The objective of the exhibition is to demonstrate the capabilities of the reTHINK Framework for the developer, the service provider and the end user.

The reTHINK framework is a decentralised communication infrastructure that enables developers to easily build and integrate communication services that are faster, more effective, more trustful and inherently inter-operable. The reTHINK framework is an alternative to current dominant walled-garden communication networks that empowers the users with the choice and the management of their private data and identities.

The reTHINK Framework provides the tools to build a global network of micro-services called hyperlinked entities (hyperties) that are executed at the edge and trustfully communicate through a messaging framework.



This innovative architecture allows implementing complex services and applications inherently interoperable and executed in devices, on behalf of users, through identity delegation. Identity management is based on Identity Mapping and Discovery Service (IMaDS) in order to find contactable and active endpoints (software that handles interactions within terminals/devices) with sustainable and user defined identities. Common data models are the only agreement needed for inherent interoperability.

Finally reTHINK offers a disruptive Quality of service management for real time communications.

Description of the Demo

(describe the technologies and/or applications being demonstrated, up to 300 words)

Several scenarios will be demonstrated to illustrate reTHINK benefits, including:

- The Smart Contextual Assistance application that provides Contextual Communications and Connected Devices control. Different types of ad hoc communication, including group chat, videoconference and file sharing, are supported across domains (including legacy domains), while giving the user the power to decide which identity to use. The user experience is automatically adapted e.g. the contact list and shared files, according to user context in order to improve user focus and effectiveness.
- The Enterprise Conversational Application (Smart Business App) is a real-time communication solution that

	<p>allows company employees to better collaborate through web-based messaging, audio/ video calls, and video conferences, enjoying a unified address book with automatic presence status updates. It also has the ability to differentiate between Enterprise internal and external communications (visitor of the company web site).</p> <ul style="list-style-type: none"> • Priority Management for Enterprise Web applications: uses the two previous demos, as a user can use the “Smart Contextual Communication” in a context that is not business, for a personal usage service that is not considered important by the enterprise, thus not benefiting of QoS. When it is in concurrency with data traffic flow, there is communication quality loss. When the context changes to a business call, it uses the business application. This application has been white listed by a Business administrator as a priority. Then it benefits of a good quality, even when with concurrent data traffic. • The Smart Contacts application illustrates the identity model of reTHINK and allows the user to associate its service identities to a global user identifier and to be discoverable/reachable on his/her choice to the service he/she decided to be available to all. It is based on the discovery service of rethink and the Global Registry, a shared Distributed Hash Table.
<p>General Public Adequacy (indicate whether the content being shown is adequate to be presented to the general public; if the answer is positive, describe the specific aspects that serve this purpose)</p>	<p><input type="checkbox"/> Yes (X) <input type="checkbox"/> No</p> <p>The content of the exhibition is intended and suitable for the general audience of the EUCNC conference. The exhibition content targets service developers, service providers, and end users.</p>
<p>Size of the booth</p>	<p><input type="checkbox"/> 6 m² (x) <input type="checkbox"/> 12 m²</p>
<p>Requirements (indicate the needs for equipment for local renting, network connections, furniture, electrical needs, shipment and storage area, monitors, etc.)</p>	<p>RELIABLE open Internet connectivity (no blocked ports) Two separate networks are required for the demonstration of QoS management.</p>