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Safe Life Extension management of aged infrastructures networks and industrial plants

Coordinator: EU-VRi - The European Virtual Institute for Integrated Risk Management (EEIG) Website: www.SafeLife-X.eu-vri.eu Contact: SafeLifeExtension@eu-vri.eu Start date: September 2013; End date: August 2015; Duration: 24 months Budget: 1 M€- EC contribution: 1 M€ FP7-NMP.2013.4.0-6 – Grant Agreement no. NMP2-CA-2013-608813

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PARTNERS

Main Beneficiaries (Partners)

- 1. European Virtual Institute for Integrated Risk Management, **EU-VRi**, Germany
- 2. Steinbeis Advanced Risk Technologies GmbH, **R-Tech**, Germany
- Institut National de l'Environnement Industriel et des Risques, INERIS, France
- 4. FUNDACIÓN Tecnalia RESEARCH & INNOVATION, **Tecnalia**, Spain
- 5. Stichting Destares, **Deltares**, The Netherlands
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- 7. Forum of European National Highway Research Laboratories, **FEHRL**, Belgium
- 8. Electricite De France S.A., EDF, France
- 9. EnBW Erneuerbare und Konventionelle Erzeugung AG, EnBW, Germany
- 10. Vce Vienna Consulting Engineers ZT GMBH, VCE, Austria
- 11. Stuttgart Research Center for Interdisciplinary Risk and Innovation Studies, ZIRIUS, Germany

Project Summary

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The importance of aging of infrastructures, networks and industrial plants will continue to increase because of (a) need to continue operation of these infrastructures, networks and plants beyond the design life-time, (b) need to operate under changed conditions and (c) the increased role of existing plants in the optimized ("smart") supply and utility networks of the future, e.g. as fall-back supply. The effective agreed strategies to address aging issues are yet to be developed and consistently applied. The project, SafeLife-X, will contribute to creating consensus on aging management including potential cascading and/or ripple effects. It will, thus, satisfy the demand within various industrial sectors and help match the EU Grand Challenges and the EU-2020 Strategy, and achieve goals of main stakeholders (e.g. EC, OECD, ECTP, ETPIS...).

The project will create a multi-disciplinary / multi-sector community able to answer the key issues related to aging at EU & International level. The consortium includes members of the EU Technology Platforms ECTP (construction) and ETPIS (industrial safety) and a group of 25 experts to complement the expertise needed, and will be open to all interested parties. This community will meet, share experience and prepare a common vision for the future and main elements needed to realize it. The project will capitalize on best practices of modeling, asset integrity management, decision making, and cost-benefit analysis. CEN Workshop Agreement(s) will be initiated in the course of the project and the development of one European Standard (EN) on "Risk-Based Inspection Framework" pursued. New projects will propose input for Horizon 2020 within the Strategic Research Agenda & Roadmap.

SafeLife-X will explore the issue of aging as an opportunity for new technologies, services and businesses primarily in service and construction sectors, the latter being the largest EU industrial employer representing 9.9% of the GDP and 14.9 million operatives.

Overall Strategy

The overall goal of the project is to improve aging management for infrastructures networks and industrial plants so that their availability is maximize and their management is cost effective. The project strategy is based on the following operational objectives:

- Enable mutual exchanges and cross-fertilization between several industry sectors to improve the general practices for aging management
- Capitalize the best practices into guidance documents and into documentary standards
- Prepare the future with a strategic research agenda and an implementation strategy



The project is therefore organized around 7 workpackages (Coordinating activities).

Outcomes of the project

Knowledge exchanged during the project will be collated in the form of reports and conclusions of discussion workshops. In addition, it is foreseen to prepare guidance documents and initiate documentary standards based on the results of the project. Finally, the community constituted thanks to the project will agree on a common vision, prepare the strategic research agenda and implementation strategy that will be operated jointly under the supervision of the ECTP reFINE initiative and ETPIS SafeFuture.

The most important outcomes of the project will be:

- Proceeding of the thematic workshops
- Guidance documents and documentary standards
- Strategic Research Agenda and Roadmap (implementation strategy)
- Creation of a "aging" community (active network) with a stakeholder platform
- Cross fertilization and awareness raising about methods and tools to manage aging
- Inform the preparation of new regulation in EU and OECD countries (through the liaison with the OECD working group on Chemical Accidents)

These outcomes will be the features to propose a "New Approach" for aging management. "New Approach" means:

- "Global" as defined in the Guide to the Implementation of Directives Based on New Approach and Global Approach from the EC to avoid divergences between regional regulations,
- "Dynamic" in order to develop durable and suitable solutions,
- "Leading to service" in order to create a new market for the construction sector.

"Aging" Community

Becoming member of the "Aging" community will give you access to information on the activities of the SafeLife-X project (workshops, consultations, publications of reports...).

Members will have opportunities to share their point of view on different issues related to aging.

Further information on www.SafeLife-X.eu-vri.eu

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