



30 years of bringing green ideas to LIFE

Introduction to the seminar and the LIFE programme



Safety and security integration:
principles, approaches, and challenges

Gabriele Landucci

Safety and security integration: principles, approaches, and challenges

Time slot	Theme	Speaker
08:30-09:00	Welcome reception and registration of participants	-
09:00-09:20 (20 min)	Introduction to the seminar and the LIFE programme	G. Landucci, University of Pisa (Italy)
09:20-09:50 (30 min)	Normal accident theory and case studies	W. Overdijk, Crisisplan BV (The Netherlands)
09:50-10:20 (30 min)	Security aspects related to critical installations: quantitative analysis of accident scenarios	V. Busini, Politecnic of Milan (Italy)
10:20-10:50 (30 min)	Lessons on crisis management	W. Broekema, University of Leiden (The Netherlands)
10:50-11:20	Coffee break	
11:20-11:50 (30 min)	Responsible organizations and aware communities for a REAL sustainable development	F. D'Andrea, University of Perugia (Italy)
11:50-12:20 (30 min)	Qualitative content analysis in the framework of critical areas	A. Tortolini, University of Pisa (Italy)
12:20-12:50 (30 min)	Round Table	G. Landucci, University of Pisa (Italy) (Chair)
12:50-13:00 (10 min)	Conclusions and end of the seminar	G. Landucci, University of Pisa (Italy)
13:00-14:00	Buffet light lunch	



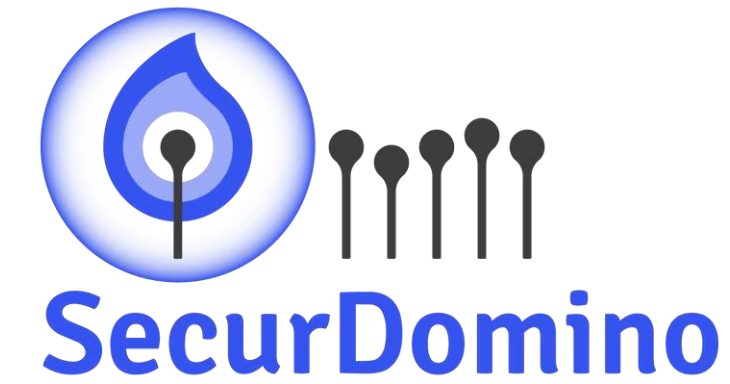
#LIFEis30

European Climate, Infrastructure and Environment Executive Agency (CINEA)

The LIFE Programme is the EU's funding instrument for the environment and climate action. On 21 May 2022 it turned thirty

- LIFE so far has co-financed more than 5 500 projects
- The European Commission has increased LIFE funding by almost 60% for 2021 -2027. It now stands at €5.4 billion
- The climate and biodiversity crises are more present than ever, but LIFE projects provide hope and inspiration for future solutions
- LIFE is instrumental for the Green Deal

30 years of bringing green ideas to LIFE



#LIFEis30

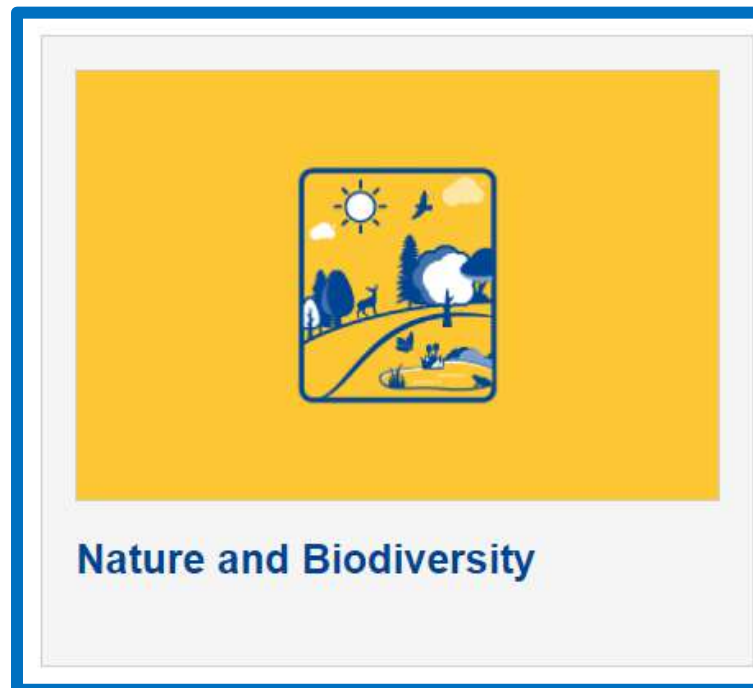
- LIFE has four sub-programmes now: nature and biodiversity, circular economy and quality of life, climate change mitigation and adaptation, and clean energy transition



30 years of bringing green ideas to LIFE



#LIFEis30



The **Nature and Biodiversity sub-programme** will aim at the protection and restoration of Europe's nature and halting and reversing biodiversity loss. Thus, the LIFE Nature and Biodiversity sub-programme will continue to fund nature conservation projects, in particular in the areas of biodiversity, habitats and species

30 years of bringing green ideas to LIFE



#LIFEis30



Nature and Biodiversity



Circular Economy and Quality of Life



Climate Change Mitigation and Adaptation



Clean Energy Transition

The Circular economy and quality of life sub-programme aims at facilitating the transition toward a sustainable, circular, toxic-free, energy-efficient and climate-resilient economy and at protecting, restoring and improving the quality of the environment, either through direct interventions or by supporting the integration of those objectives in other policies.

30 years of bringing green ideas to LIFE

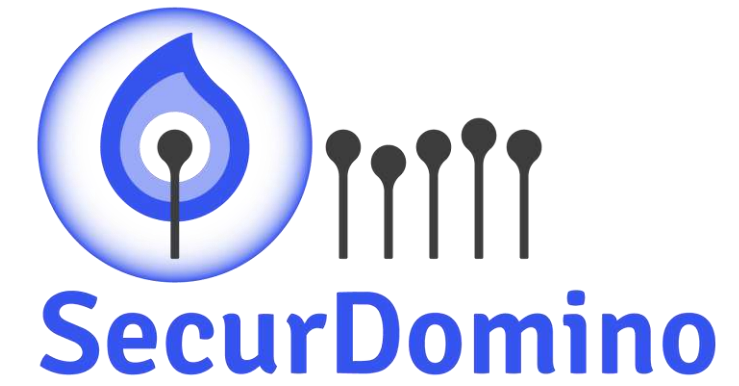


#LIFEis30

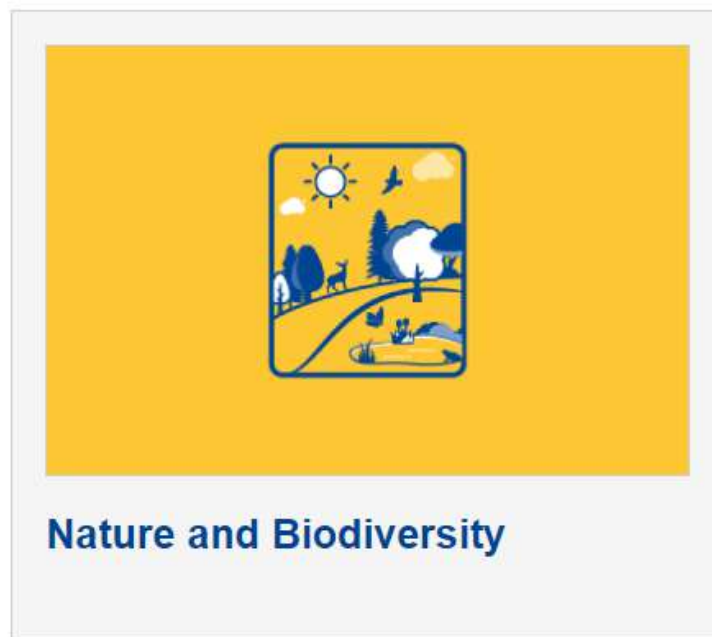


The [Climate Change Mitigation and Adaptation](#) sub-programme will contribute to the shift towards a sustainable, energy-efficient, renewable energy-based, climate-neutral and resilient economy, thereby contributing to sustainable development.

30 years of bringing green ideas to LIFE



#LIFEis30



Nature and Biodiversity



Circular Economy and Quality of Life



Climate Change Mitigation and Adaptation



Clean Energy Transition

the [LIFE Clean Energy Transition sub-programme](#) continues to support the delivery of EU policies in the field of sustainable energy, in particular, the European Green Deal, the Energy Union (2030 energy and climate targets) and the European Union's 2050 long-term decarbonisation strategy.

30 years of bringing green ideas to LIFE



UNIVERSITÀ DI PISA



LIFE20 ENV/IT/000436 –
LIFE SECURDOMINO

Seveso sites: assessment of
integrated safety-security hazards
and risks and related domino
effects

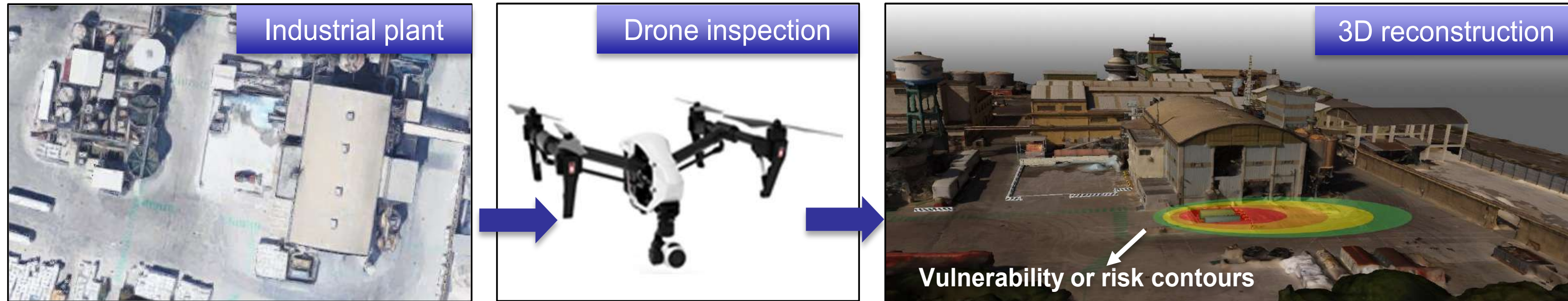
LIFE Environment and Resource Efficiency



The LIFE SECURDOMINO project
has received funding from the European Union
under Grant Agreement n° LIFE20 ENV/IT/000436

Project objectives (1)

Tool development. integrated safety/security assessment of hazard and risks and related domino effects in Seveso sites



Tool parallel testing in 3 industrial DEMO sites. DEMO SITE 1: Costieri D'Alesio S.p.A.
DEMO SITE 2: Bolton Group (Manetti & Roberts), Calenzano plant (Florence, Italy)
DEMO SITE 3: Wilhelmsen Ships Service B.V., Rotterdam, The Netherlands



SecurDomino

www.securdomino.eu

The LIFE SECURDOMINO project
has received funding from the European Union
under Grant Agreement n° LIFE20 ENV/IT/000436



Project objectives (2)

Improvement of the safety-security aspects. DEMO sites vulnerability and risk will be reduced through the tool application improving the safety-security status

- Reduce pollution and GHG emissions due to major accidents of 40%
- Reduce the vulnerability and risks in the DEMO sites of average 40% (5% and 4.3 fat/ 1000 y) based on preliminary vulnerability and security risk estimation (expressed in PLL - potential life loss)

Reduce SEVESO inspection costs of 10%. the tool will allow for the reduction of time and staff effort for planning plant inspections and monitoring safety-security barriers.

Project objectives (3)

Awareness raising. The project will allow to raise awareness of regulators, competent authorities, industrial managers and consultants on prevention and mitigation of domino effects by external acts of interference and to integrate safety-security aspects in plant management

Replication. The project will lay the foundations for replicating the system in the 53 Seveso sites in Tuscany (IT) and 185 sites in North Brabant and South Holland (NL). Potential reduction of pollution (12 t/y) and GHG (900 t/y) 5 years after the project

Transfer. The project will be also aimed at extending the tool to other non-Seveso sites, such as manufacturing, food processing, water treatment plants, etc.

Safety and security integration: principles, approaches, and challenges

The interconnected nature of critical installations and, in particular, SEVESO Sites makes them vulnerable targets for external acts of interference, which might cause cascading events affecting multiple systems.

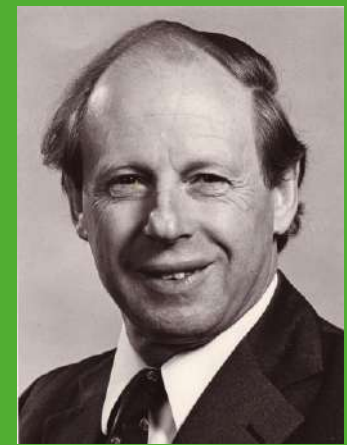
INTERDISCIPLINARY APPROACH is required to cope with the complex nature of this threat.



Safety and security integration: principles, approaches, and challenges

Time slot	Theme	Speaker
08:30-09:00	Welcome reception and registration of participants	-
09:00-09:20 (20 min)	Introduction to the seminar and the LIFE programme	G. Landucci, University of Pisa (Italy)
09:20-09:50 (30 min)	Normal accident theory and case studies	W. Overdijk, Crisisplan BV (The Netherlands)
09:50-10:20 (30 min)	Security aspects related to critical installations: quantitative analysis of accident scenarios	V. Busini, Politecnic of Milan (Italy)
10:20-10:50 (30 min)	Lessons on crisis management	W. Broekema, University of Leiden (The Netherlands)
10:50-11:20	Coffee break	
11:20-11:50 (30 min)	Responsible organizations and aware communities for a REAL sustainable development	F. D'Andrea, University of Perugia (Italy)
11:50-12:20 (30 min)	Qualitative content analysis in the framework of critical areas	A. Tortolini, University of Pisa (Italy)
12:20-12:50 (30 min)	Round Table	G. Landucci, University of Pisa (Italy) (Chair)
12:50-13:00 (10 min)	Conclusions and end of the seminar	G. Landucci, University of Pisa (Italy)
13:00-14:00	Buffet light lunch	





Trevor Kletz

If you think SAFETY* is expensive, try an accident

* /SECURITY

30 years of bringing green ideas to LIFE



30 years of bringing green ideas to LIFE



Thank You!



www.securdomino.eu



[@Facebok](#)



[@Linkedin](#)



The LIFE SECURDOMINO project has received funding from the European Union under Grant Agreement n° LIFE20 ENV/IT/000436