



# SESAMO

*Security and Safety Modelling*

## EXECUTIVE summary

SESAMO addresses the root causes of problems arising with convergence of safety and security in embedded systems at architectural level, developing a component-oriented design methodology for the safety and security aspects.

## RELEVANCE CALL objectives

SESAMO occupies a unique position within the ARTEMIS strategic programme. By focusing on system safety and security not separately, as in the past, but together, SESAMO will enable advances in areas in which there are currently gaps and opportunities for European industry to gain a competitive advantage.

## MARKET innovation

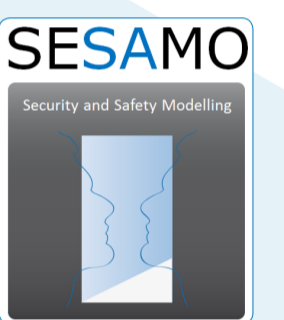
All technological SESAMO results are embedded in a process-related, methodological context, accompanied by guidelines for using them within the SESAMO design process. The introduction of the SESAMO disciplined analysis and design process together with component and tool support will reduce the cost of building safe and secure products that rely on embedded IT systems.

The building blocks developed in SESAMO are intended to be reusable across domains and, if applied within the methodology-driven process supported by SESAMO tools, less effort will be required to obtain systems with verifiable safety and security related characteristics.

## TECHNICAL innovation

The major innovative aspects of the SESAMO approach are:

- > a rigorous framework that enables joint reasoning about the required safety and security properties and the resolution of any conflicting constraints;
- > identification and development of enabling mechanisms for safety and security;
- > elaboration of the methodological solutions that are essential to the safety and security-oriented design and analysis process;
- > a model-based methodology and solutions for addressing safety and security aspects within an integrated process, supported by an effective tool chain;
- > decision support strategies to allow the resolution of critical situations during system operations based on the safety and security requirements of the system;
- > characterisation and assessment of the SESAMO results from a multiple-domain industrial perspective (such as aerospace, energy management, automotive, metropolitan rail and mobile medical).



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| <b>INSTITUTION</b><br>Intecs S.p.a.          | <b>DURATION</b><br>36 months             |
| <b>EMAIL</b><br>silvia.mazzini@intecs.it     | <b>TOTAL INVESTMENT</b><br>€12 M         |
| <b>WEBSITE</b><br>http://sesamo-project.eu   | <b>PARTICIPATING ORGANISATIONS</b><br>20 |
|  | <b>NUMBER OF COUNTRIES</b><br>8          |

