Eclipse and OPEES

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Our constraints

One example : AIRBUS A300

- Program began in 1972 and will stop in 2007

  2007-1972 = 35 years...

- Support will last until 2050

  2050-1972 = 78 years !!!

On board software development for very long lifecycle products

Open source business model for industrials

- **What we expect from an open source model**

  ‣ Insure a continuity of tools with respect to industrial challenges

  ‣ Avoid single-source dependency : knowledge is shared

  ‣ Take advantage of innovation and risk sharing

  ‣ Contribute to standardization effort

  ‣ Federate the on board software development tools market and gather a significant users community in this area

  ‣ Reduce the temptation for offshore development made on US tools by managing in Europe the creation of added value components
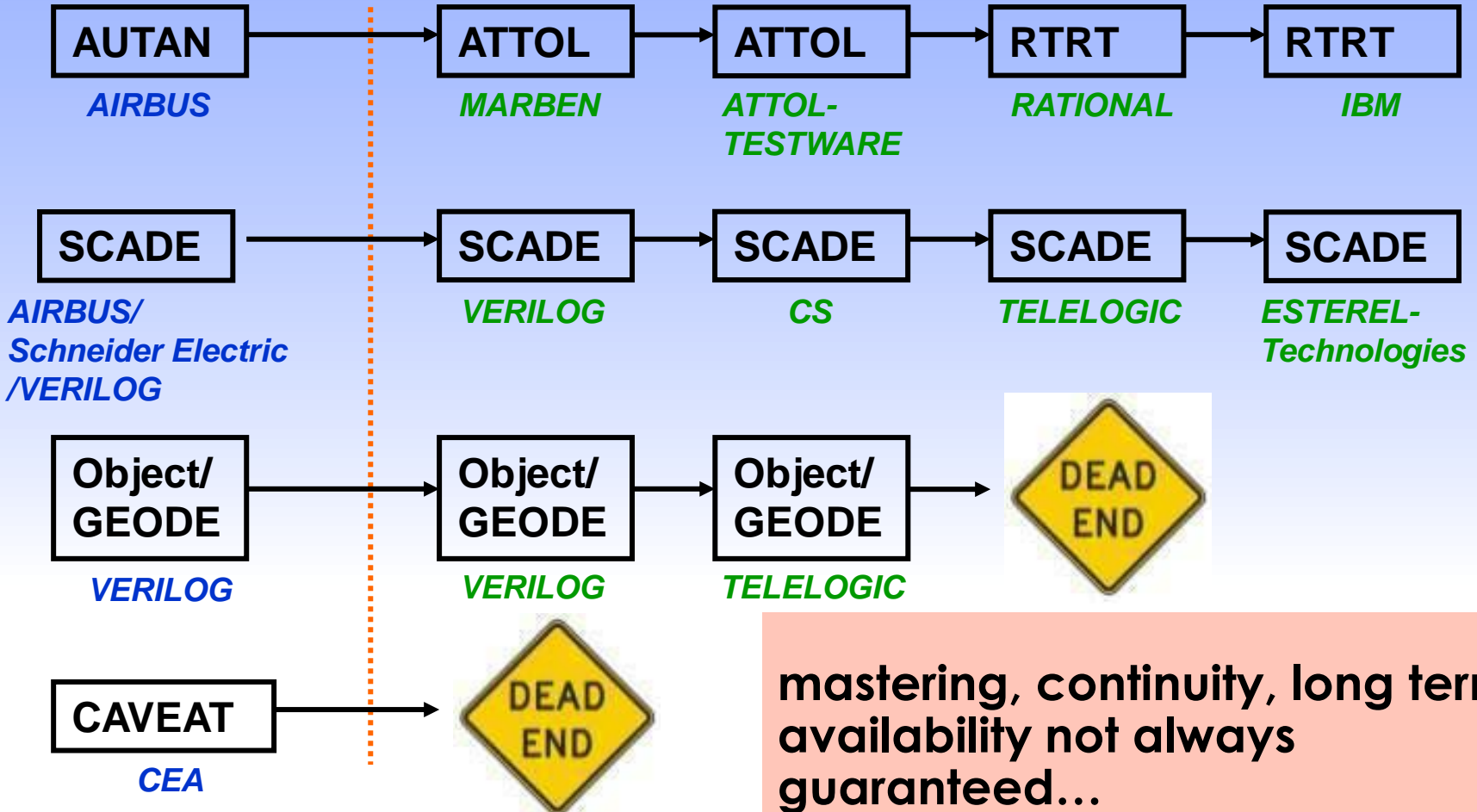
AIRBUS

TOPCASED

- **TOPCASED: an Open Source system development environment, implementing an integrated model-based development process, from the system specification down to the final product**

- **Open source engineering tools are already available and deployed in aircraft programmes**

- **Current running research project should complete the tool chains**

- **The next step is to ensure long term maintenance and evolution of the tools through adequate infrastructure and organization**

This is the purpose of OPEES initiative

AIRBUS

A short story of tools, sad examples:

Industry / research centres

Commercial world

AUTAN		ATTOL	ATTOL	RTRT	RTRT
AIRBUS		*MARBEN*	*ATTOL-TESTWARE*	*RATIONAL*	*IBM*

SCADE		SCADE	SCADE	SCADE	SCADE
AIRBUS/ Schneider Electric /VERILOG		*VERILOG*	*CS*	*TELELOGIC*	*ESTEREL-Technologies*

Object/ GEODE		Object/ GEODE	Object/ GEODE	DEAD END
VERILOG		*VERILOG*	*TELELOGIC*	

CAVEAT		DEAD END
CEA		

mastering, continuity, long term availability not always guaranteed…
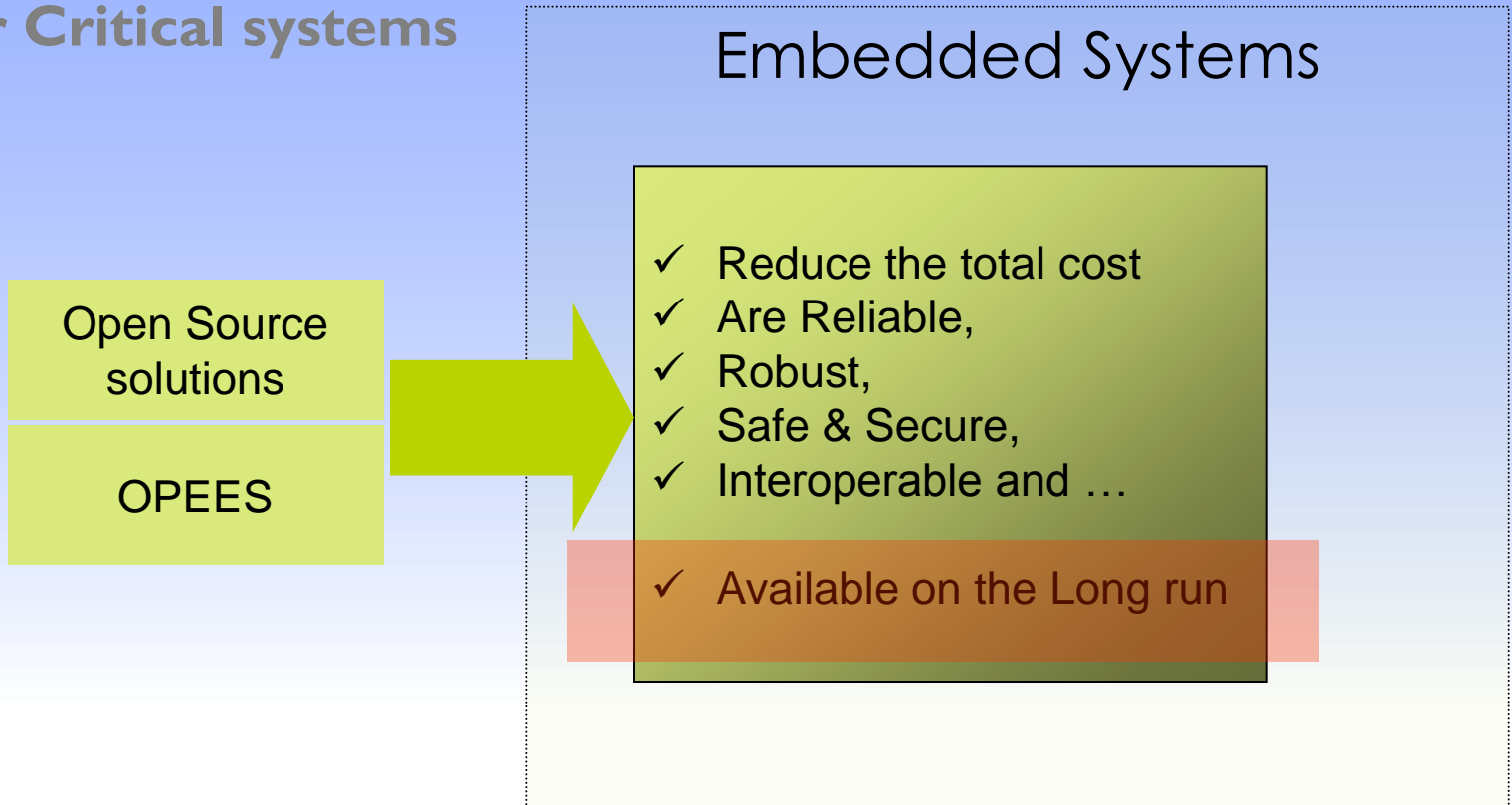
Introducing Opees[1]

Mission

Ensure long-term availability of

critical / embedded systems engineering technologies

to secure industry competitiveness and development

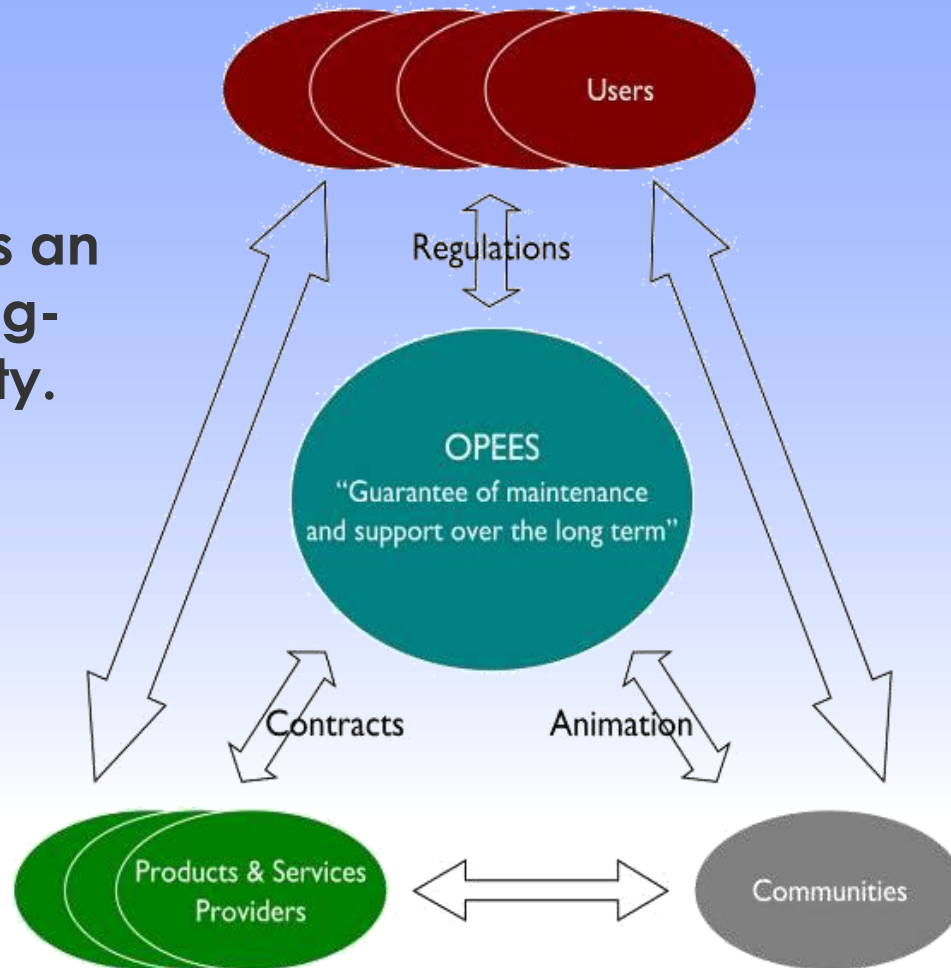1 : Open Platform for the Engineering of (Critical) Embedded Systems

Why Opees ?

To ensure the long term availability of Open Source tools for Critical systems

Embedded Systems

Open Source solutions
OPEES

→

- ✓ Reduce the total cost
- ✓ Are Reliable,
- ✓ Robust,
- ✓ Safe & Secure,
- ✓ Interoperable and …

- ✓ Available on the Long run

Opees' Magic

Open source is an enabler for long-term availability.

Users

Regulations

OPEES
"Guarantee of maintenance and support over the long term"

Contracts

Animation

Products & Services Providers

Communities

OPEES coordinates the actions of users, suppliers and communities in order to ensure the maintenance and support over the long term

Opees ITEA project
30 members from 5 European countries

Some Context

- From last year's program plan:
  - "Offer hosting and IP services to other consortia. E.g. "white label" services for industry working groups (e.g. allow IWGs to maintain private code bases under a non-EPL license, etc. in a controlled access area."

- These things take time

The Eclipse Opportunity

- Create an industry working group focused on safety-critical software engineering for aerospace
  - Possible future expansion to automotive and public transportation (e.g. rail)
- $200K - $300K in funding
- 2 to 2.5 full time headcount
  - IP team
  - Build and long-term support
  - Web content and IT infrastructure support

Activities Requiring Board Approval

- Firewalled web properties accessible only by OPEES members
- Support new licenses in the OPEES IP process, including LGPL
  - Possibly GPL in the future.
- New build infrastructure for OPEES and Long Term support issues
- Trademark and certification support
- Creation of a more formal European chapter
  - an Eclipse legal entity in Europe
  - servers in Europe