

Polarsys



Gaël Blondelle - Obeo
Ralph Müller – Eclipse Foundation



The Eclipse Foundation



Ralph Müller

Eclipse Foundation

History

2001 - Eclipse Project by IBM

2004 - Rich Client Platform

2004 – Independent Organization: Eclipse Foundation

2006 - Callisto Release Train

2008 - Top Level Runtime Project

2009 - Industry Working Groups



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About the Eclipse Foundation

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What is Eclipse and the Eclipse Foundation?

Eclipse is an open source community, whose projects are focused on building an open development platform comprised of extensible frameworks, tools and runtimes for building, deploying and managing software across the lifecycle. The Eclipse Foundation is a not-for-profit, member supported corporation that hosts the [Eclipse projects](#) and helps cultivate both an open source community and an ecosystem of complementary products and services.

Related

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Thank you

Thanks to
for their ge
infrastruct

Members



Members By Category

175 members

- 11 Strategic Members

- 1 Enterprise Member

1017 committers, representing 75+ organizations

Strategic Members



Computer Associates®

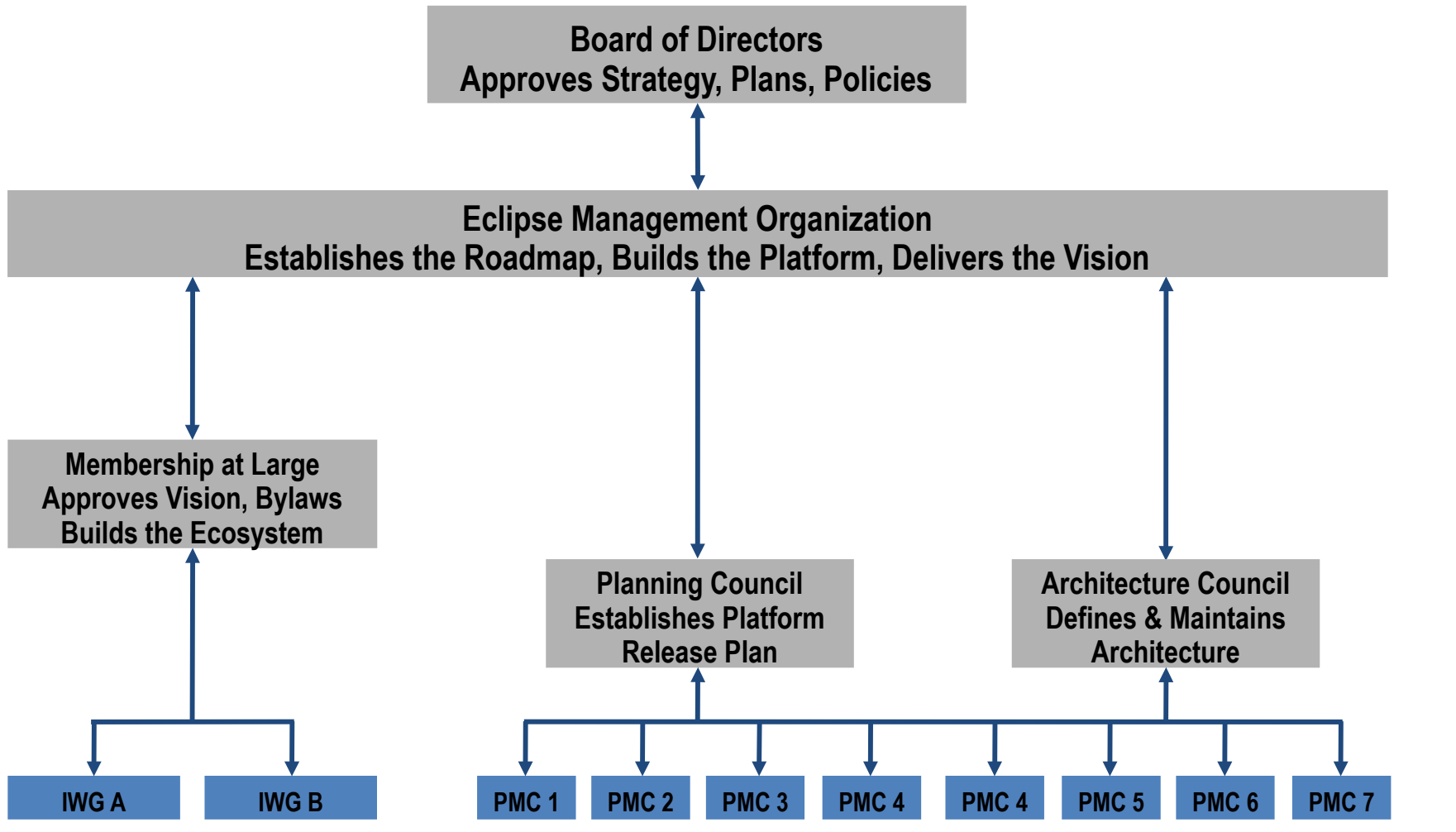


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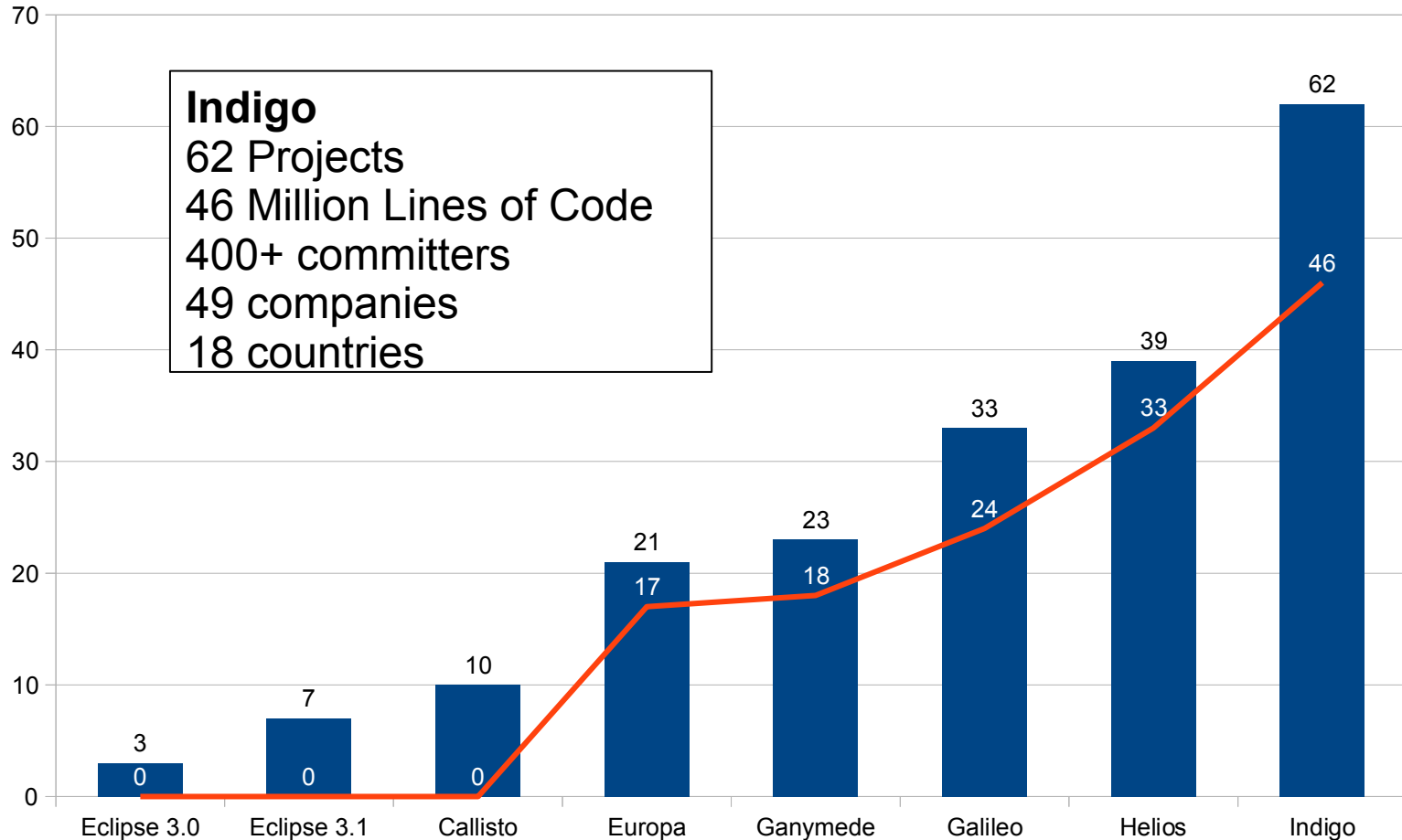
Enterprise Members



Eclipse Governance Structure



World Class Reliability



Industry Orientation

2010 – Automotive IWG

2011 – Long Term Support IWG

2012 – Polarsys IWG

2013 - openETCS

Polarsys



Gaël Blondelle
Obeo
OPEES project leader



Long Term Availability

AIRBUS A300 Life Cycle

Program began in 1972, production stopped in 2007

2007-1972 = 35 years...

Support will last until 2050

2050-1972 = 78 years !!

**On board software development
for very long lifecycle products**



Tools Users Requirements

Master tools

Ensure tools durability in line with product lifecycle

Adapt tools easily to the specific internal processes

Use Open Standards for interoperability and data mgmt

Lower vendor lock-in

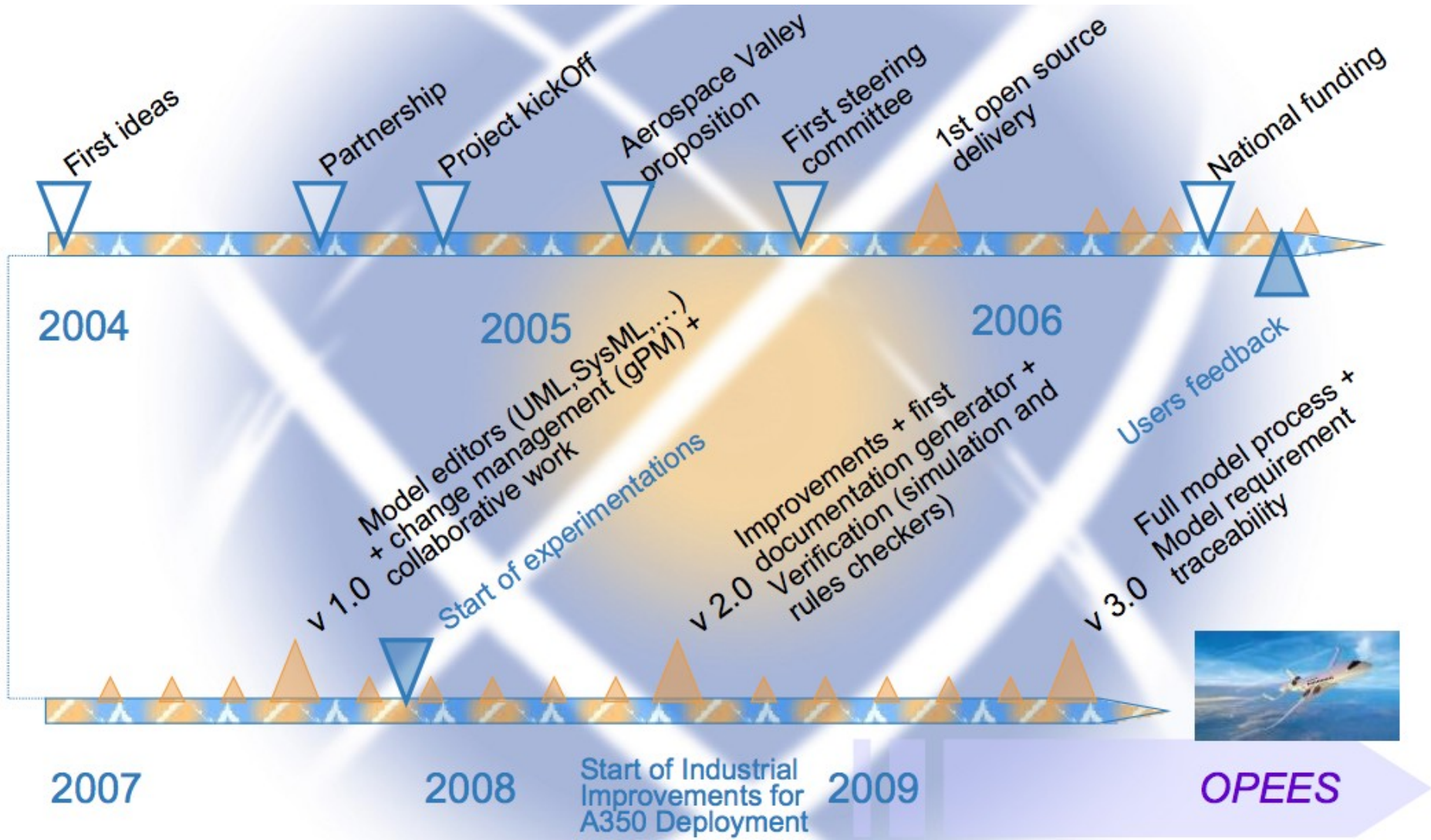
Lower license deployment costs in extended enterprise

Optimize Evolution & Maintenance costs

Deploy Training & Knowledge

Ensure continuous innovation

From Topcased to Polarsys



OPEES

**Open Platform for the Engineering
of (Critical) Embedded Systems**

**Create a sustainable ecosystem to
Ensure the long term availability of
tools for the development of
Critical systems**

OPEES ITEA2 project

Project Consortium



A vertical rounded rectangle containing logos for various French aerospace and defense organizations. At the bottom, the word "France" is written.

Logos include: AIRBUS, Atos, ALYOTECH, EADS, cnes, cea list, CS, DASSAULT IRIT, INRIA LINAGORA, MBDA, beo, ONERA, THALES, and Xipp.

France



A rounded rectangle containing logos for KATHOLIEKE UNIVERSITEIT LEUVEN and spaceapplications. Below the logos, the word "Belgium" is written.

KATHOLIEKE UNIVERSITEIT
LEUVEN
spaceapplications

Belgium



A rounded rectangle containing the logo for IKT NORGE. Below the logo, the word "Norway" is written.

IKT NORGE

Norway



A rounded rectangle containing logos for UNIVERSITY OF SKÖVDE, ERICSSON, and COMBITECH. Below the logos, the word "Sweden" is written.

UNIVERSITY OF SKÖVDE

ERICSSON

COMBITECH

Sweden

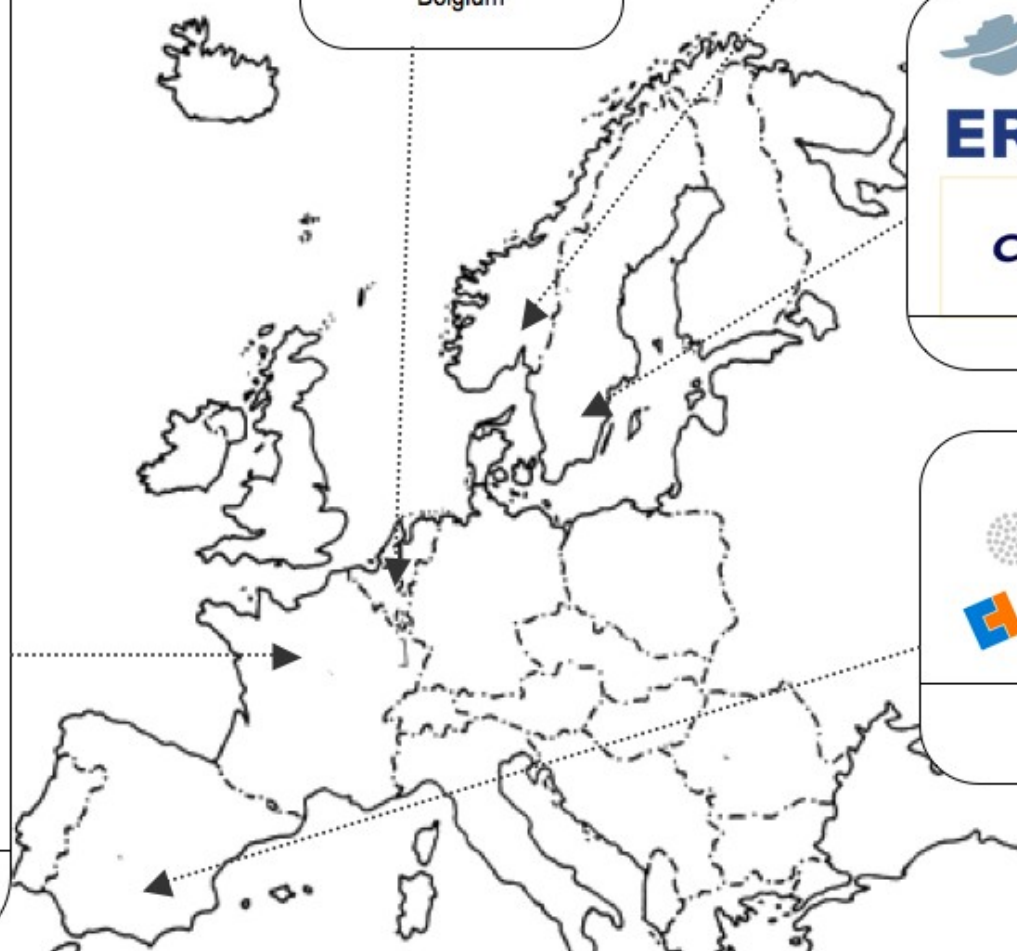


A rounded rectangle containing logos for indra, SCS, tcp, and UNIVERSIDAD POLITECNICA DE VALENCIA. Below the logos, the word "Spain" is written.

indra SCS

tcp UNIVERSIDAD POLITECNICA DE VALENCIA

Spain



Open Source Software as an enabler

Open code and open formats
facilitate

- Migration
- Interoperability
- Extensibility

Create de facto standards

Clarify Intellectual Property

Enable long term support

Share common platforms

Combination of make or buy
depending on feature

OSS Freedoms*

Freedom 0

to run the program, for any purpose

Freedom 1

to study how the program works,
and change it to make it do what
you wish

Freedom 2

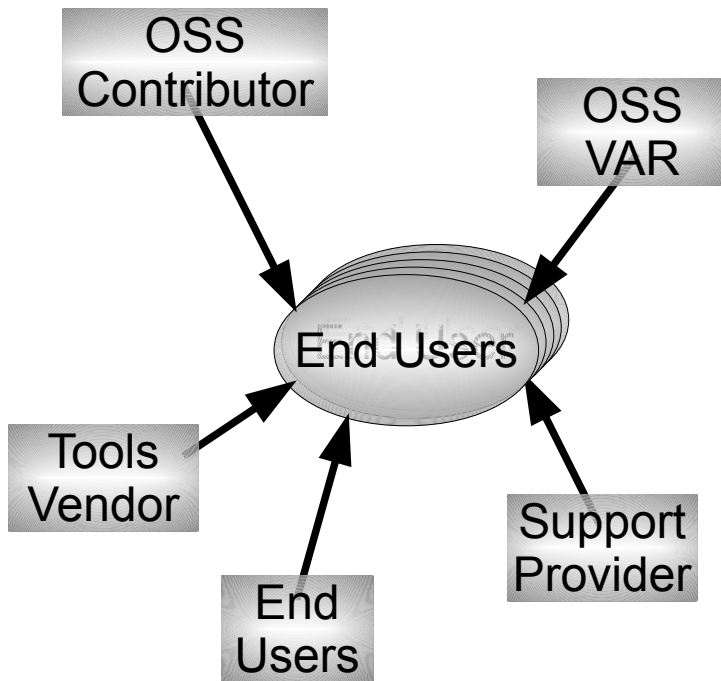
to redistribute copies

Freedom 3

to distribute copies of your
modified versions to others

(*) As defined by the Free Software Foundation

Towards a User Centric Strategy



Tools are adapted to user needs

User share solutions and efforts on common parts

Goal:

- At least **80%** Features Requests implemented as generic features
- **20%** implemented as user extensions

Polarsys Industry Working Group inside



OSS collaboration infrastructure

- Collaboration infrastructure
 - Source code repositories, forum, mailing list, wiki, ...
 - Development process, meritocracy, ...
- Intellectual Property Management
 - License management
 - Copyright
 - Contribution traceability & ownership
 - Manage licenses compatibility

Long Term Support

- Vendor neutral approach for
 - Long Term Availability
 - Ensure shared best practices
 - No vendor lock-in on build processes
- Not an intermediary between Providers and Users
- Common infrastructure (CBI) operated by the Eclipse Foundation
- Provides VLTS
- Foster the Long Term Support Ecosystem

Qualification kits

- Qualification Kits are Polarsys private documents
- Provide base documents to be adapted for specific certification process
 - Component development plan
 - Component test plan
 - ...

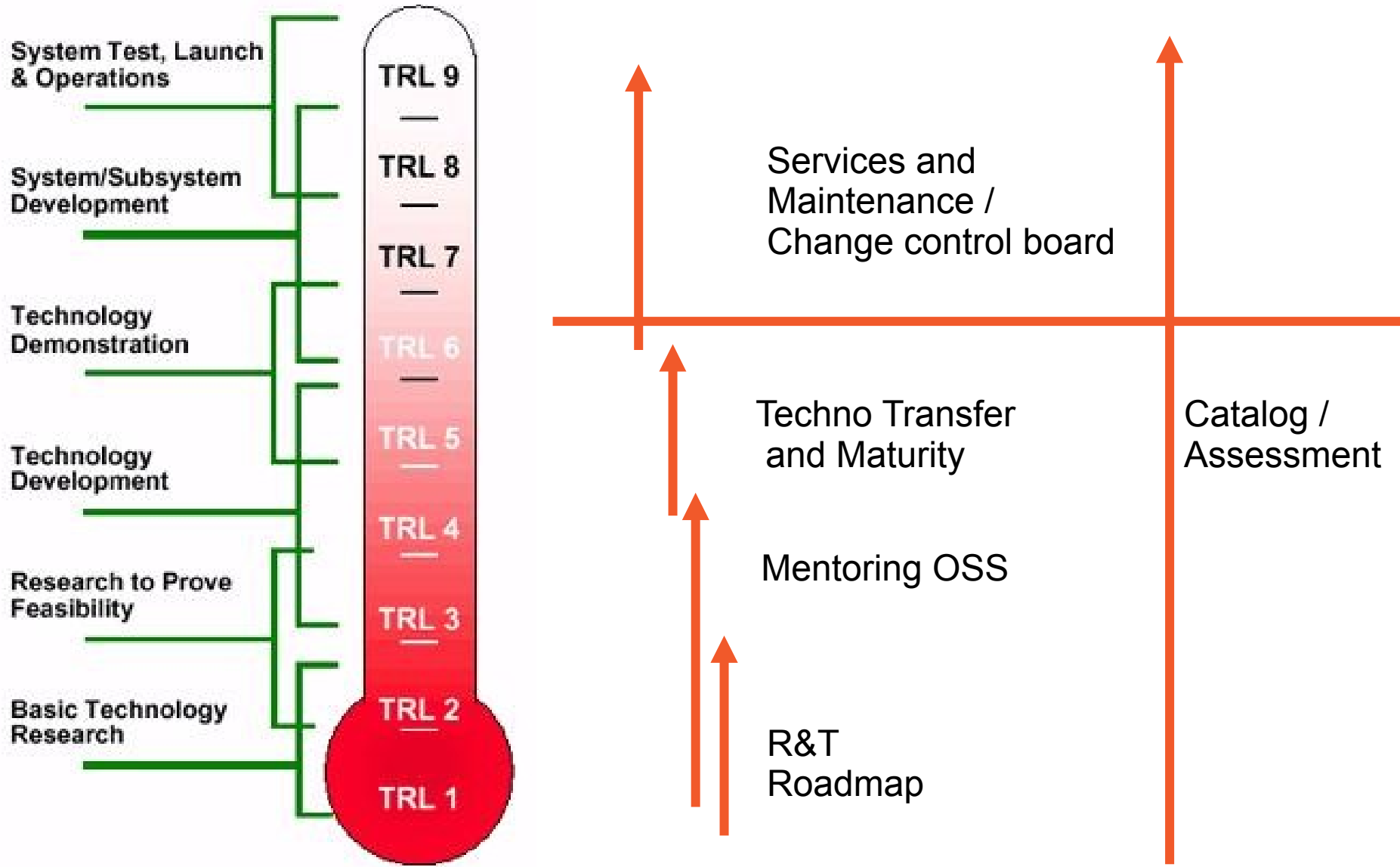
Labeling Process

- Structures the Providers eco-system
- Labeling process identifies
 - Committed service providers
 - Skilled service providers
- Label recognize a proven expertise and investment in the technology
- Complements the OSS meritocracy

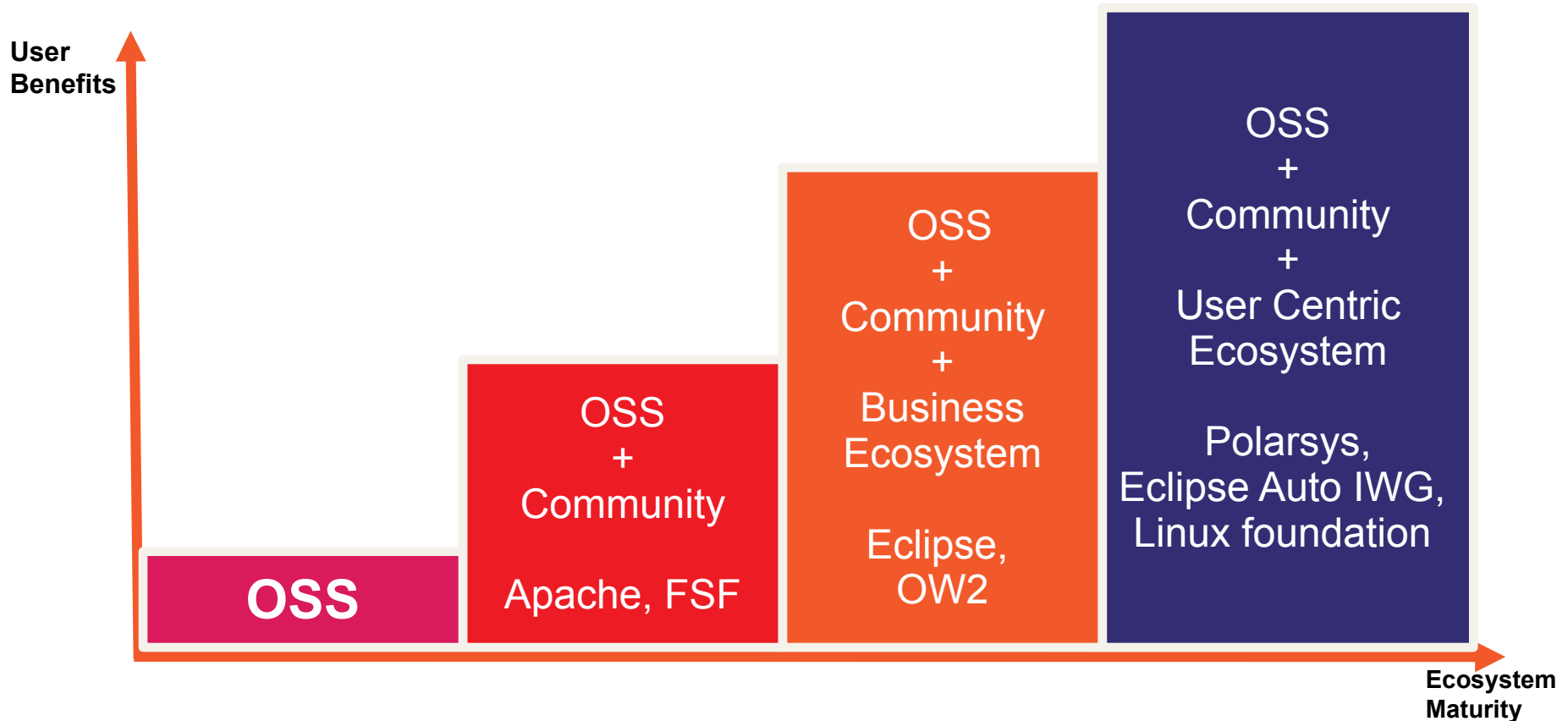
Change Control Boards for OSS projects

- Change Control Board
 - Manage the change process
 - Users prioritize new developments and fixes
- Complements Project Management Committees
 - PMC are driven by developers and committers
- Balancing innovation and industrial quality

TRL & Polarsys



New generation of OSS ecosystems



Polarsys pillars

Open Source and Open innovation,
Maturity Assessment,
Long term availability,

For tools for the development of
critical embedded systems



Join us!

