

A Model-driven development framework for highly Parallel and EneRgy-Efficient computation supporting multi-criteria optimisation

# D7.1 Communication and Dissemination Plan Version 0.3

#### **Documentation Information**

Contract Number	871669
Project Website	www.ampere-euproject.eu
<b>Contratual Deadline</b>	31.03.2020
Dissemination Level	[PU]
Nature	R
Author	Dayana Fernandes Muzzetto (BSC)
Contributors	Nikoleta Kiapidou (BSC), Enkhtuvshin Janchivnyambuu (SYSGO)
Reviewer	Frank K. Gürkaynak (ETHZ), Björn Forsberg (ETHZ), Luca Benini (ETHZ)
Keywords	Dissemination, Communication, KPIs



This project has received funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 871669.



# Change Log

Version	Description Change
V0.1	Initial version released by Dayana Fernandes Muzzetto (BSC)
V0.2	Contribution by Nikoleta Kiapidou (BSC) and Enkhtuvshin Janchivnyambuu
V0.3	Review by Frank K. Gürkaynak (ETHZ)



# **Table of Contents**

Ex	recutive Summary	3
1.	Introduction	4
2.	Dissemination strategy	5
	2.1. Objective	5
	2.2. Target Audiences	5
3.	Dissemination team	9
4.	Branding and project identity	10
	4.1. Corporate image	10
	4.2. Logo	10
	4.3. Typography	11
	4.4. Language	11
	4.5. Project template	11
	4.5.1. Presentation template	11
	4.5.2. Poster template	12
	4.5.3. Deliverable template	12
5.	Dissemination tools and channels	13
	5.1. Website	13
	5.2. Social Media	13
	5.3. Dissemination pack	14
	5.4. Events	14
	5.5. Publications	16
	5.6. Press strategy	16
6.	Exploitation	18
	6.1. Key performance indicators (KPIs)	19
7	Acronyms and abbreviations	20



# **Executive Summary**

This document defines the dissemination objectives for the AMPERE project and the main target audiences, along with the main dissemination activities and channels used. It also includes the policy to disseminate the results. It is a "dynamic" document that should be revised periodically by the WP7 team, over the course of the project.

This plan intends to raise awareness and interest in the developed technologies and solutions among the target groups such as the developers, industry stakeholders, embedded/HPC community, policy makers and the general public. The presence of leading research HPC institutions ensure the wider dissemination potential through scientific channels, while industrial partners will focus more on the exploitation and technology transfer activities.



## 1. Introduction

The main purpose of the Dissemination and Communication work package (WP7) is to disseminate project's results in order to connect with and receive the attention of stakeholders about the AMPERE technology. This document also aims at engaging with academics and the general public to disseminate the project's main features and benefits.

This deliverable will cover the dissemination and communication plan. The communication strategy was developed taking into account:

- Definition and identification of target audiences.
- Messages and channels.
- Activities and communicational tools.

#### This plan aims to:

- Identify a list of potential stakeholders and customers as identified in the SoW.
- Identify the development of dissemination material.
- Identify the participation in industrial and academic forums.



## 2. Dissemination strategy

### 2.1. Objective

The overriding objective of the dissemination strategy is to maximize the visibility of the project as well as to transfer knowledge and technology created in the project out of the AMPERE industrial ecosystem.

In order to accomplish this, the following actions will take place:

- Raise awareness about the project and its results reinforcing the message about the key role of the AMPERE in building European expertise in the design of dependable and physically entangled systems and bolstering competitiveness in productive parallel programming.
- Update key stakeholders on project progress.
- Build community a strong community around the AMPERE technology.

The exploitation strategy will build a deep understanding of the project market and exploitation context, aiming at providing a solid base for further exploitation actions. It will be described in a separate deliverable D7.3 Initial exploitation report, which will be updated in yearly reports D7.5 Intermediate exploitation report and D7.7 Final exploitation report.

## 2.2. Target Audiences

During the project, the WP7 team aims to communicate the project to key industrial and scientific communities, policy makers and the wider public, and disseminate the results so that they can be used by stakeholders such as researchers and application developers.

The main value of the project to each target audience has been identified and key messages drafted based on this value proposition, along with the most appropriate communication channels for each audience.



Table 1: Target audience

Target audience	Value proposition	Key messages	Register	Channels
Application developers	<ul> <li>Increase the performance of dependable and physically entangled system while ensuring that functional and nonfunctional constraints are met.</li> <li>Ability to develop parallel source code using MDE, without having in-depth knowledge of parallel programming.</li> <li>Innovative programming methods and tools that increases SW development productivity.</li> </ul>	<ul> <li>Leverage the parallel computation capabilities of the most advanced COTS parallel heterogeneous platforms without in-depth knowledge of computing architectures.</li> <li>Expressing non-functional constraints at application level met by the parallel execution.</li> </ul>	For specialists	<ul> <li>Website</li> <li>Social media</li> <li>Events such as DATE, DAC, ICCAD, AspDAC, DASIA, HiPEAC conference, ESWeek: CASES, EMSOFT and CODES+ISS</li> <li>Press releases</li> </ul>



Embedded/HPC
research
community

- New research on the parallel execution in context of embedded systems.
- Enable use of COTS parallel heterogeneous processors in critical embedded contexts with huge potential applications.
- Enabling the use of HPC applications (e.g. data analytics, AI) in CPSos

- Innovative new research converging HPC and critical real-time computing.
- Opening up highperformance capabilities to embedded systems and nonspecialists in parallel programming.
- Parallel execution meets time-criticality, fault tolerance and energy efficiency.

#### For specialist

- Website
- Social media
- Events such as DATE, ISC, HiPEAC conference, ASPLOS, RTSS, ECTRS, ISORC, IPDPS, PACT, LCTES, OSPERT, RTLWS, ELCE, IWOMP, MODELS
- Journal publications such as IEEE Transactions on Industrial Informatics, IEEE Transactions on Computers, IEEE Transactions on Parallel and Distributed Systems, IEEE Micro, ACM Transactions on Architecture and Code Optimisation, ACM Transactions on **Embedded Computing,** Spring Real-Time Systems Journal, Elsevier Journal of System Architecture, Elsevier Journal of Systems and Software.
- Press releases



Industry stakeholders	<ul> <li>Performance tailored to the size/power consumption/response-time/dependability constraints of CPSos.</li> <li>Greater efficiency and reliability in a range of sectors.</li> <li>New business opportunities for innovative, scalable technologies, from automotive to railway infield data analysis and machine learning.</li> <li>Parallel safety systems roadmaps.</li> </ul>	<ul> <li>Maximize the performance of CPSoS based on advanced COTS parallel heterogeneous architectures.</li> <li>Predictable high performance with lower energy consumption and fault tolerance, safety and security features.</li> <li>The missing link which opens up business opportunities in burgeoning markets, from data analytics, AI, and CPS to Internet-of-Things.</li> </ul>	<ul> <li>Website</li> <li>Social media</li> <li>Events such as DATE, DAC, ICCAD, AspDAC, DASIA, HiPEAC conference, ESWeek: CASES, EMSOFT and CODES+ISS Embedded World Exhibition/Conference, Embedded Real Time SW and Systems, ITS European Congress, and AspDAC</li> <li>Press releases</li> </ul>
Policy makers	<ul> <li>Opening up opportunities to enhance European competitiveness in emerging new markets.</li> <li>Pan-European research achieving more than could be achieved in individual countries.</li> <li>Transfer of cutting-edge technology from EU-</li> </ul>	<ul> <li>Building upon European expertise in HPC and embedded systems and gaining lost ground in parallel computation.</li> <li>Multidisciplinary, crosssector collaboration across national borders, uniting expertise fragmented across different countries.</li> </ul>	<ul> <li>Website</li> <li>Social media</li> <li>Events such as DATE, DAC, ICCAD, AspDAC, DASIA, HiPEAC conference, ESWeek: CASES, EMSOFT and CODES+ISS Embedded World Exhibition/Conference, Embedded Real Time SW and Systems, ITS</li> </ul>



	funded research to European businesses.  Cross-pollination of two different computing domains.	Ensuring transfer of technology to European industry.	European Congress, and AspDAC  • Press releases	d
General public	<ul> <li>Greater confidence in the reliability of connected systems and technology used in different sectors.</li> <li>A research project with clear practical benefits for a range of sectors.</li> </ul>	<ul> <li>Cutting-edge technology systems ensuring more intelligent, autonomous and trustworthy technology systems for a range of sectors.</li> <li>Development of intelligent mobility solutions.</li> <li>Publicly funded research benefiting businesses.</li> </ul>	<ul> <li>Website</li> <li>Social media</li> <li>Events such as ISC, DAT ECSEL JU Joint Symposium</li> <li>Press releases</li> </ul>	E,



# 3. Dissemination team

The WP7 team includes nine organizations, which are represented in Table 2. The total number of person months from each partner is shown in the list below.

Table 2: Dissemination team

Participant role	Participant organization	Person months (PM)
WP Leader	BSC	12
Participant	ISEP	2
Participant	ETH Zürich	2
Participant	SSSA	2
Participant	EVI	6
Participant	BOSCH	5
Participant	THALES	5
Participant	THALIT	5
Participant	SYSGO	3



# 4. Branding and project identity

### 4.1. Corporate image

A common graphic identity in all dissemination tasks allows for better visibility and recognition as well as branding of the project. All dissemination material will include the name of the project, the website and the graphic elements described in this section such as the logo, written in American English (US), D3 Euronism Bold, and the corresponding template, if applicable.

The brand of the AMPERE project includes its corporate image, brand and style. Guidelines will be given to all partners to ensure coherence and consistency.

#### 4.2. Logo

The main image of the project is the logo, which comes in different formats:

- Logo with the whole name of the project: this will be the first logo used, as in the beginning the aim is to build a brand and the whole name acts as a full description.
- Logo with URL: this logo will be used once the project is well recognized and content has been created and uploaded to the website, which will be used as a reference for information.
- Logo: this logo may be used on promotional materials when printed small and once the brand is well recognized and established.

AMPERED

A Model-driven development framework for highly Parallel and EneRgy-Efficient computation supporting multi-criteria optimisation

AMPERED

www.ampere-euproject.eu

Figure 2: Logo in black and white

Figure 1: Different formats of the AMPERE logo



The name of the project refers to all the actions that will be developed within the project in order to create a software stack for cyber-physical systems. The design of the logo has a unique visual identity that includes systems created out of systems on the right side and colors that give the look and feel of energy-efficiency and high performance.

The colors of the logo are related to the project's objectives, which are the optimization of multi-criteria by the use of low energy highly parallel and heterogeneous computing systems.

In particular, blue has been used as the main color, which is associated with technology and innovation. The complementary green and orange are used for energy efficiency.

This logo, approved by all AMPERE partners, will be included in all documentation related to the project and should be ideally used in color. All versions of this logo will be downloadable in different formats on the media corner of the website as well as in the project's intranet.

The logo will be included in all material related to the AMPERE project made available to the public. The logo will be available in color as well as black and white.

Both, the branding guide and logos will be sent to all partners and will also be available in the project's internal repository.

#### 4.3. Typography

The font defined for the AMPERE logo is D3 Euronism Bold, which has a rounded finish that provides a technological character.

The recommended font to be used for all documentation is Calibri because it is available on the vast majority of computers. Calibri should be used in all dissemination materials.

#### 4.4. Language

The official language of the AMPERE project is American English (US). However, the dissemination material should be translated into the different languages within the consortium, where possible. Each partner should ensure that the materials are adequately translated into the local languages, e.g., in the case of the press releases for the local media. Funding for this is not included in the dissemination budget.

## 4.5. Project template

A set of designed templates will be used in the project.

## 4.5.1. Presentation template

The presentation template will be used in all presentations done by all partners and will be added to the internal repository for all partners to use. The presentation template is available both in Microsoft PowerPoint and Open Office, as well as in format 16:9 and 4:3 for different projectors (see image below). This template gives some design guidelines, as well as a general-purpose AMPERE PowerPoint content template that can be incorporated into other presentations in order to disseminate the project and its results.



Figure 2: Presentation template



#### 4.5.2. Poster template

The poster template is in PowerPoint format and will be used in all poster presentations in different events. It is a basic layout template which the partners fill in with different scientific and technical content depending on the presentation objective and audience. It will be included in the internal repository for all partners to use.

Figure 3: Poster template



#### 4.5.3. Deliverable template

WP7 prepared a template for all deliverables with the logo and its structure. The font used is Calibri font. The template will be uploaded on the intranet and sent to all partners to use.



#### 5. Dissemination tools and channels

In order to efficiently reach the targets for dissemination and to maximize the visibility of the project, a broad spectrum of communication channels and dissemination tools will be used. The role of the dissemination tools or activities shall ensure that the different target audiences are aware of the AMPERE project.

The public website is the first point of contact and plays a significant role in dissemination followed by a carefully chosen list of scientific conferences, as well as the rest of the external communication tools. Moreover, communication activities include a dissemination pack, organization of and participation in events, press coverage and scientific publications are part of the dissemination strategy to increase awareness from technical and non-technical audiences.

#### 5.1. Website

The project website will be hosted at <a href="http://www.ampere-euproject.eu">http://www.ampere-euproject.eu</a>. Barcelona Supercomputing Center (BSC) is responsible for the construction, maintenance and hosting of the website.

The main objectives of the website are to:

- Provide a source of technical information: technical details, deliverables and academic papers will be made available during the project.
- Call to action: the website will encourage its audience to get involved in the project, possibly (in the later stages of the project) through some interactive examples, videos, or similar material if deemed appropriate.
- Provide news and updates: to reflect the activity of the project and demonstrate an active community and progressive project.

All partners will be notified once the public website (<a href="http://www.ampere-euproject.eu">http://www.ampere-euproject.eu</a>) has gone live. The WP7 leaders, in collaboration with the dissemination team, are the main people responsible for editing the website content, website deliverables, feedback and statistics. Moreover, an editorial plan will be developed for partners to follow up in order to populate the website with technical and generic news pieces.

The website will be designed with the content management system Drupal. This system will be managed by a webmaster and web design team located in the Operations team at Barcelona Supercomputing Center. It will be designed as a multi-device experience that works well across different device types: PCs, tablets and mobile phones. Also, the website will integrate any multimedia material, such as social media accounts and videos, as well as host the internal repository for the project.

It will also use a visitor statistics monitoring system from Google Analytics. This information will help to improve the content and structure of the site, as well as having more information about the target audiences.

#### 5.2. Social Media

Nowadays social media can be considered to be a good dissemination channel to reach the project's target audiences. Social media provides a way to raise awareness about AMPERE and engage a wider range of potential stakeholders.

As the world's largest professional networking site, LinkedIn offers an excellent way to connect with developers, researchers and the wider public. The <u>AMPERE Linkedin page</u> will be used to post news and information about the project's participation in events. The goal is to share technical discussions with



industry-related stakeholders in order to engage with the project. The LinkedIn activity is monitored via LinkedIn Analytics, which show general information on followers, visitors, and visitor demographics, such as their sector background.

In order to be able to have access to networking on the go and communicate with everyone in real-time an <u>AMPERE Twitter account</u> will be used. Twitter will be used as a platform to create synergies with other similar stakeholders and influencers in order to boost the impact of the project's dissemination activities. Through this channel the objective is to reach academia and, if possible, industry. Twitter Analytics will provide information about the account's performance and analyze the effect of and reaction to different communication activities, which will help improve our future actions.

As AMPERE counts on partners that have an excellent network of contacts in each field in social media, the AMPERE dissemination team will ask partners to always help disseminate news, updates, dissemination material, videos, etc. on their own social media channels focusing mainly on Twitter and LinkedIn.

Finally, we will also ask the EC Project Officer and communication responsible associated to AMPERE to help us disseminate the AMPERE related news on their own social media channels and news services such as CORDIS, Digital Single Market and FutureTechEU Twitter accounts.

## 5.3. Dissemination pack

Basic collateral for use by project partners will be produced including:

- Leaflet: The general leaflet will provide information about the AMPERE project, its objectives and
  future achievements and its impact or benefit to society. The leaflet will be uploaded to the
  Branding section of the website so that project partners can easily download and print it for their
  own dissemination purposes. It will also be distributed at events.
- Poster: A general overview poster will be developed to be used by all partners. The first version of
  the poster will include a general description of the project and its aims, as well as the use cases and
  a brief description of the technology. The poster will be periodically updated as the first results are
  published and will be used in all events where AMPERE needs to be promoted. It will be uploaded
  on the project's internal repository.
- Overview presentation: A presentation with a general overview of the project will be designed. It
  will be used by all partners in dissemination activities in which the project needs to be presented
  for the first time to an audience. This presentation is useful in order to transmit the project's
  objectives, key messages and KPIs in an aligned fashion, regardless the presenter. The presentation
  will be periodically updated if needed. Along with the rest of the dissemination material, the
  presentation will be uploaded on the AMPERE intranet.
- Videos: Understanding that our society is increasingly consuming information by visual means, the
  dissemination team will produce videos during the project, in English with subtitles in local
  languages. Developing of this video is an engaging and informative means of communicating the
  project's results, aims, and applications. All partners will contribute to disseminate the videos. They
  will be widely shared with the partners, technical media, and other online channels.
- Whitepaper: It provides information about the project, but it is more comprehensive and therefore
  it is aimed at a more technical and scientific audience. The objective is to develop one
  factsheet/whitepaper for business and one for the scientific community. The choice of factsheet or
  whitepaper will be made depending on the type of material and the target audience.

#### 5.4. Events

Another important dissemination channel will be attendance and presentations at high-level peer-reviewed conferences in the field of HPC, Internet of Things, embedded systems, computer design, automation, and machine learning, etc. Presenting the latest updates of the project at such events, meetings or workshops



will be an effective means of involving industry leaders in standards discussions early on. The list of targeted academic/industrial events includes conferences and networks of excellence.

Table 3 includes an indicative list of events that AMPERE could potentially participate in. Most of these are regular annual events and we plan to continue to identify additional events throughout the project.

Table 2: Events

Events	Date and location
DATE (Design Automation and Test in Europe)	9-13 March 2020. ALPEXPO, Grenoble, France
DAC (Design Automation Conference)	19-23 July 2020. San Francisco, CA. USA.
ICCAD (Int. Conf. on Computer Aided Design)	2-5 November 2020, San Diego, USA
AspDAC (Asia and South Pacific Design Automation Conf.)	18-21 Jan 2021, Tokyo Odaiba Waterfront, Japan
DASIA (Data Systems In Aerospace)	26-28 May 2020, Bucharest, Romania
ESWeek (CASES: Conf. on Compilers, Architectures, Synthesis for Embedded Systems)	11-16 October 2020, Shanghai, China
ESWeek (EMSOFT: Conf. Embedded Software)	11-16 October 2020, Shanghai, China
ESWeek (CODES+ISS: Conf. on HW/SW Codesign and System Synthesis)	11-16 October 2020, Shanghai, China
ASPLOS (ACM Int. Conf. on Architectural Support for Programming Languages and Operating Systems)	16-20 March 2020, Lausanne, Switzerland
RTSS (IEEE Real-Time Systems Symposium)	3-6 December 2020, Houston, USA
ECRTS (Euromicro Conference on Real-Time Systems)	7-10 July 2020, Modena, Italy
ISORC (IEEE Int. Symp. on Real-Time Computing)	19-21 May 2020, Nashville, TN, USA
HiPEAC (High Performance Embedded Architecture and Compiler Conference)	18-20 Jan 2021, Budapest
IPDPS (IEEE Int. Parallel & Distributed Processing Symp.)	18-22 May 2020, New Orleans, LA, USA
PACT (Int. Conf. on Parallel Architectures and Compilation Techniques)	3-7 October 2020, Atlanta, GA, USA
LCTES (ACM SIGPLAN Languages, Compilers, and Tools for Embedded Systems)	15-20 June 2020, London, UK
OSPERT (Operating Systems Platforms for Embedded Real-Time applications)	7 July 2020, Modena, Italy



ELCE (Embedded Linux Conference Europe)	26-28 October 2020. Dublin, Ireland	
IWOMP (Int. Workshop on OpenMP)	23-25 Sep 2020, Austin, TX USA	
MODELS (Int. Conf. on model-driven engineering Languages and Systems)	18-23 October 2020. Montreal, Canada	
Embedded World Exhibition	25-27 February 2020. Nuremberg, Germany	
Embedded Real Time SW and Systems	29-31 January 2020. Toulouse, France	
ITS European Congress	18-20 May 2020. Lisbon, Portugal	

Please note, that these dates may change and events might get cancelled due to the Covid-19.

#### 5.5. Publications

The consortium is committed to providing at least "green" open access publications wherever feasible. The dissemination team has reviewed the Guidelines to the Rules on Open Access to Scientific Publications and Open Access to Research Data in Horizon 2020 and defined a strategy for knowledge management and protection. Green open-access defines that the author, or a representative, archives (deposits) the published article or the final peer-reviewed manuscript in an online repository before, at the same time as, or after publication. Some publishers request that open access may be granted only after an embargo period has elapsed.

Green access allows beneficiaries deposit the final peer-reviewed manuscript in a repository of their choice. They must ensure open access to the publication within at most 6 months (12 months for publications in the social sciences and humanities) after publication to a third party publisher. To provide support concerning compliance with Horizon 2020 embargo periods, the Commission offers a model amendment to publishing agreements, which are often signed between authors and publishers. This model is not mandatory but reflects the obligations of the beneficiary under the H2020 grant agreements. It can be supplemented by further provisions agreed between the parties, provided they are compatible with the Grant Agreement. The Commission/Agency takes no responsibility for the use of this model.

Based on these rules, all resulting publications (publications, white papers, technical reports, etc.), as well as dissemination materials, should include the following sentence:

"The AMPERE project has received funding from the European Union's Horizon 2020 research and innovation programme under the grant agreement Nº871669."

The WP7 team will prepare publication guidelines and will share them with partners and upload them on intranet.

#### 5.6. Press strategy

The press strategy will be consistent with the dissemination strategy and its objectives. As one of the most relevant dissemination activities, the press strategy will last for the complete duration of the AMPERE project.

Press releases are one of the most effective ways of communicating the existence of the AMPERE project to a specific target audience (see <u>target audience</u>). Press releases attract attention to the project's progress and its achievements. During the project, different press releases will be launched.

The initial press release is the most important one because it defines the AMPERE project objectives as well as its working plan. Ideally, in the middle of the project, there should be another press release in order to



explain its progress. A final press release will be launched at the end of the project to wrap up the works and present the final results.

The first press release has been published and shared with various technical media, while all press releases will be included in the AMPERE press clipping page. All partners have the opportunity to include them on their institutional websites (example: <a href="BSC">BSC</a> on its project website) in order to increase the click rates and referrals. In addition, all partners have been encouraged to write a press article about AMPERE to be shared with local media channels. All partners are encouraged to translate the press releases in their national language and share it with local media channels.



# 6. Exploitation

Exploitation is a major commitment for AMPERE as proven by the diversity of industries in the consortium, and the IAB interested in the exploitation of AMPERE results. The exploitation activities will include the AMPERE ecosystem and the tools that form it and the definition of a roadmap for the adoption of parallel heterogeneous computing in safety critical systems. The fact that the AMPERE ecosystem is based on already existing tools (most of them owned by AMPERE partners) targeting COTS parallel heterogeneous computing platforms, provides two key exploitation advantages: (1) the time-to-market will be reduced as most of these tools are already used in industry; and (2) it will enable partners to incorporate into their portfolio offerings tools supporting COTS low-energy parallel heterogeneous computing platforms, potentially increasing their revenues. Overall, we consider that this strategic decision is a key mechanism to maximize exploitation opportunities and facilitate the rapid exploitation of the AMPERE ecosystem. With the objective to maximize exploitation opportunities, AMPERE will perform the following activities:

- Identification of project exploitable assets, including the set of tools composing the AMPERE
  ecosystem, interim and final results as well as the various evaluation activities and lessons learnt
  from investigation on safety standards (including automotive and railway), as to conclude on
  potential business models and exploitation pathways.
- Identification of the main exploitation routes for the consortium as a whole, for specific groups of partners sharing similar interests / orientation as well as for each partner separately.
- The procedures to protect IPR of individual tools when being integrated into the AMPERE ecosystem, with an accurate analysis on potential conflicts among the different licenses that will coexist, e.g., open-sources vs. proprietary.
- Identification and analysis of the target users (early adopters Associated and followers) that may benefit from the project results and achievements.
- Analysis of the exploitation context and business opportunities in application domains in order to find out what is the actual market situation. Although this study will consider all potential CPS domains, special interest will be given to those in which AMPERE partners can have business opportunities and the IAB members.
- Assess the competitive environment surrounding the project such as technology readiness, integration, standardization and regulatory, and policy framework at the targeted markets as well as future trends at both social, business and policy level.
- Major attention will be given to the development of a credible sustainability plan of results that
  entails the evaluation of project achievements' acceptability by the business world, addressing: (1)
  IPR management, (2) open source communities for promotion, (3) the definition of a joint
  exploitation agreement, etc.

These activities will be identified and included in the AMPERE Exploitation Plan. A first release is planned for month 12, with the objective of allowing for a fast feedback on exploitable assets and business opportunities. A first complete version will be delivered at month 27, when first interim results based on AMPERE test-bench suite will be available. The final version will be delivered at month 36, when the use case results will be completed. This document will examine and assess the plan(s) for the project results' exploitation and commercialization (including the creation of a spin-off), taking into account technological evolutions and market changes during the project. The feedback gathered during consortium interaction and discussions with IAB members and other key external stakeholders and experts, industrial actors and decision makers in the targeted markets will be crucial to address strengths (benefits), weaknesses (drawbacks and prerequisites), opportunities (existing conditions suitable to promote the wide adoption of results) and threats. This constitutes the basis for planning the successful exploitation and leads to the



identification of mechanisms to achieve the actual widespread adoption of results. Moreover, AMPERE will identify the suitable certifications commonly used in the different industrial domains (ISO26262, IEC61508, EN50126, EN50128 and EN50129) as well as achievable safety metrics (e.g., ASILs for automotive and railway safety) when model transformations are applied. A list of actions and guidelines to tackle the certification will be collected and formalized in a document. In those environments in which stringent certification processes are not required, the AMPERE technology will be able to be rapidly adopted.

## 6.1. Key performance indicators (KPIs)

All dissemination activities and tasks will be carefully monitored in order to measure their effectiveness. Quality metrics will be examined; examples of quantitative indicators could be as follows:

Table 3: KPIs

Key performance indicator	Explaination	Total target (by the end of the project)
Scientific Publication	Papers published in scientific venues and journals	At least four publications per year
Academic and Industrial Events	<ul> <li>Participation in events</li> <li>Events organized, including conference booths, tutorials and workshops (with significant attendance, i.e. above 30 people)</li> </ul>	<ul> <li>At least 10 participations</li> <li>At least one event organized and a booth in smart mobility related event</li> </ul>
Press Strategy	<ul><li>Number of press releases</li><li>Press clippings</li></ul>	<ul><li>One press release per year</li><li>At least 25 press impacts</li></ul>
Whitepapers and Factsheet	Number of business and scientific whitepapers or factsheets published	At least one business and one scientific whitepaper or factsheet
Website	Visitor statistics (number of unique website visitors and their location captured by Google Analytics)	At least 1000 unique visitors per year
Social Media Channels	<ul> <li>Number of followers in Twitter</li> <li>Number of Linkedin group members</li> </ul>	<ul> <li>At least 250 over the project</li> <li>At least 150 over the project</li> </ul>
Dissemination Materials	<ul><li>Number of posters</li><li>Number of project videos</li></ul>	<ul><li>At least two posters</li><li>At least two videos</li></ul>

The above mentioned Key Performance Indicators (KPI) will be carefully monitored and revised yearly, as they might change or evolve based on the project progress.



# 7. Acronyms and abbreviations

AMPERE – A Model-driven development framework for highly Parallel and EneRgy-Efficient computation supporting multi-criteria optimisation

KPI - Key Performance Indicator

PM - Person month

PU - Public

WP - Work Package

DoA – Description of the action

BSC – Barcelona Supercomputing Center

ISEP – Instituto Superior de Engenharia do Porto

ETH Zürich – Eidgenoessische Technische Hochschule Zuerich

SSSA – Scuola Superiore di Studi Universitari e di Perfezionamento Sant'Anna

EVI - Evidence SRL

BOSCH - Robert Bosch GMBH

THALES - Thales SA

THALIT - Thales Italia SPA

SYSGO - SYSGO SRO

EC- European Commission