

# OpenADx – xcelerate your Autonomous Driving development

Steering Committee Meeting – 8<sup>th</sup> October 2019

# Agenda OpenADx Steering Committee Meeting – 08.10.2019

Time		
15:00	Welcome, Agenda	Protocol: ?? Participants:
	EclipseCon Community Day – 21 <sup>st</sup> October 2019 • Ideas for Automotive@Eclipse	
	Open topics <ul style="list-style-type: none"> <li>• Andy will connect Naci with the Eclipse team for a introduction to Hugo</li> <li>• We will add a chapter on our wiki / web page a Q&amp;A about how to participate in OpenADx and so on.</li> <li>• Git/GitHub for the Steering Committee -&gt; can Eclipse provide us this? (Andy contacts Wayne)</li> <li>• We need a coordination of approaching OEMs (maybe a closed wiki page) -&gt; Andy will make a proposal (after the Git/GitHub topic is clarified)</li> <li>• Would we become the mailing list as a discussion platform e.g. articles, legal aspects...               <ul style="list-style-type: none"> <li>• Start a kind of survey with the community, what they want with the mailing list.</li> </ul> </li> </ul>	Current state: <ul style="list-style-type: none"> <li>• Naci's team has now the contact, Meeting scheduled for 22.08.2019</li> <li>• No update</li> <li>• currently no answer on this request</li> <li>• No update</li> <li>• Community says: "Yes" (4 responses)</li> </ul>

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Time		
	F2F Workshop in Zwingenberg	Results: <a href="#">see protocol</a>  There are some leftovers: <ul style="list-style-type: none"> <li>• OpenADx Working Group Scope definition               <ul style="list-style-type: none"> <li>• OpenADx pitch deck (in 15 Minutes -&gt; What is OpenADx and why should we participate?)</li> </ul> </li> <li>• Communication Channels like LinkedIn and Twitter is "state-of-the-art" and should be used.               <ul style="list-style-type: none"> <li>• Communication Plan</li> </ul> </li> <li>• How do we activate the community?</li> <li>• Participation of OEMs in OpenADx               <ul style="list-style-type: none"> <li>• How can we activate them to participate?</li> <li>• Lead Management - Who can help whom to contact xyz?</li> <li>• We will start with Tuleap and an Excel for the Lead Management</li> <li>• We need help to setup a tracker for our tasks,</li> <li>• We need in general a short introduction to Tuleap as well as access rights for all SC members</li> </ul> </li> </ul>
	Projects, Project Proposals	Usage License
	Next steps	
	Next meeting dates	
<b>16:30</b>	End	

# Agenda OpenADx Steering Committee Meeting – 08.10.2019

Name	When?	Where?	Participation / Speaker	Link to event
Eliv	16.10. – 18.10.2019	Bonn	Check for 2020	
Eclipsecon Europe	21.10. – 24.10.2019	Ludwigsburg	- Paper submitted - Community Day (Automotive) proposed	
BMW IT Fair	23.10 – 24.10.2019	Munich	Booth powered by Wolfram	
Euroforum - International Conference Software Drives - Transformation to large scale distributed automotive software	12.11. – 13.11.2019	Stuttgart	Paper accepted	
Auto:CODE	27.11. – 29.11.2019	Berlin	“Challenge your peers” accepted	
Embedded Software Engineering Kongress	02.12. – 06.12.2019	Sindelfingen	Paper accepted	
ASAM Conference	11.12. – 12.12.2019	Dresden		
Bosch ConnectedWorld 2020	19.02. – 20.02.2020	Berlin	Participation planned	

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Eliv	16.10. - 17.10.2019	Bonn	<a href="https://www.vdi-wissensforum.de/eliv/">https://www.vdi-wissensforum.de/eliv/</a>	Check for 2020
Eclipsecon Europe	21.10. - 24.10.2019	Ludwigsburg	<a href="https://www.eclipsecon.org/europe2019">https://www.eclipsecon.org/europe2019</a>	Andy gives a talk and moderates the Automotive@Eclipse session
BMW IT Fair	23.10. - 24.10.2019	Munich		Wolfram has a booth there
IoT Solutions World Congress	28.10.2019	Barcelona	<a href="https://www.iotsworldcongress.com/agenda/w1-intelligent-connected-vehicles-an-amplified-data-management-problem/">https://www.iotsworldcongress.com/agenda/w1-intelligent-connected-vehicles-an-amplified-data-management-problem/</a>	Andy gives a talk
Euroforum - Software Drives	12.11. - 13.11.2019	Stuttgart	<a href="https://www.euroforum.de/software-eng/">https://www.euroforum.de/software-eng/</a>	Andy gives a talk
auto:CODE	27.11. - 29.11.2019	Berlin	<a href="https://auto-code.eu/">https://auto-code.eu/</a>	Andy has a session "challenge your peers"
Embedded Software Engineering Kongress	02.12. - 06.12.2019	Sindelfingen	<a href="https://www.esk-kongress.de/">https://www.esk-kongress.de/</a>	Andy gives a talk
ASAM Conference	11.12. - 12.12.2019	Dresden	<a href="https://www.asam.net/conferences-events/detail/asam-international-conference-2019/">https://www.asam.net/conferences-events/detail/asam-international-conference-2019/</a>	
Bosch Connected World (Conference)	19.02. - 20.02.2020	Berlin	<a href="http://bcw.bosch-si.com/berlin/">http://bcw.bosch-si.com/berlin/</a>	
Bosch Connected Experience (Hackathon)	19.02. - 20.02.2020	Berlin	<a href="http://bcw.bosch-si.com/berlin/hackathon/">http://bcw.bosch-si.com/berlin/hackathon/</a>	
Automotive Software Strategy Conference	03.03. - 04.03.2020	Munich	<a href="http://www.sv-veranstaltungen.de/software-strategies">www.sv-veranstaltungen.de/software-strategies</a>	Andy gives a talk
Autonomous Vehicle Software Symposium	16.06. - 18.06.2020	Stuttgart	<a href="https://www.autonomousvehicletechnologyexpo.com/en/conference.php">https://www.autonomousvehicletechnologyexpo.com/en/conference.php</a>	Paper submitted

# Backlog OpenADx Steering Committee Meeting – 08.10.2019

## Backlog - Topics

Invite Bosch colleague for presenting current state of public funded projects with relation to OpenADx

- After contracts are ready


# OpenADx – xcelerate your Autonomous Driving development

Steering Committee Workshop – 13<sup>th</sup> August 2019

# OpenADx Steering Committee Workshop - Agenda

- › Business Canvas ✓
- › OpenADx Working Group Scope definition
  - › OpenADx pitch deck (in 15 Minutes -> What is OpenADx and why should we participate?)
- › Communication Channels like LinkedIn and Twitter is “state-of-the-art” and should be used.
  - › Communication Plan
- › How do we activate the community?
- › Participation of OEMs in OpenADx
  - › How can we activate them to participate?
  - › Lead Management - Who can help whom to contact xyz?
- › Automotive Flyer ✓
- › Event Overview ✓



# OpenADx

OpenADx Steering Committee

v0.1  
Initial draft  
13.08.2019

## Key Partners



Other Eclipse Working Groups

## Key Activities



- Contribute content (SW, ...)
- Setup a demonstrator (Code first)
- Train the community (e.g. how to use Eclipse Cloe ...)
- Show the stuff at conferences, ... (Marketing)
- Using existing technologies (like Eclipse Che, OpenShift, ...)
- Investigate existing OSS projects
- Provide some Hackathons
- Talk with competitors (ADTF, ADS2, ...)

## Key Resources



- Contributions (e.g. Eclipse Cloe, Eclipse iceoryx, ...)
- Marketing Material

## Value Propositions



- Traceability (to test cases, across the toolchain ...)
- Standardization (Interfaces ...)
- Enabler, to get "in the room with big guys" Build platforms, provide frameworks
- Bringing the automotive community together (to build a bigger market)
- Provide services on top of the toolchain
- Investment protection (it is able to run in this environment)
- Saving cost and time, sharing risk
- Share expertise and access to in-house developments (Access to common knowledge)

## Buy-in & Support



## Deployment



## Beneficiaries



- ADAS Developer (OEM)
- ADAS Developer (Tier1)
- Authorities (e.g. UNECE, TÜV ...) RoboCar Racer
- Technology Provider (bringing their technology into the "standard")
- Best in class provider (e.g. cloud)
- Tool Provider (bringing their tools into the "standard" Protect its proprietary business)
- Automotive Tier1 Management
- Infrastructure provider (OSI5 layer)
- OSS developer
- Model driven developer (how the simulation framework is setup)

## Mission Budget/Cost



Personnel cost

Possibly Eclipse membership cost

## Mission Achievement / Impact Factors



## Key Partners



Who are our Key Partners?  
Who are our key suppliers?  
Which Key Resources are we acquiring from partners?  
Which Key Activities do partners perform?

**MOTIVATIONS FOR PARTNERSHIPS**  
Optimization and economy  
Reduction of risk and uncertainty  
Acquisition of particular resources and activities

## Key Activities



What Key Activities do our Value Propositions require?  
Our Distribution Channels?  
Customer Relationships?  
Revenue streams?

**CATEGORIES**  
Production  
Problem Solving  
Platform/Network

## Value Propositions



What value do we deliver to the customer?  
Which one of our customer's problems are we helping to solve?  
What bundles of products and services are we offering to each Customer Segment?  
Which customer needs are we satisfying?

**CHARACTERISTICS**  
Newness  
Performance  
Customization  
"Getting the Job Done"  
Design  
Brand/Status  
Price  
Cost Reduction  
Risk Reduction  
Accessibility  
Convenience/Usability

## Customer Relationships



What type of relationship does each of our Customer Segments expect us to establish and maintain with them?  
Which ones have we established?  
How are they integrated with the rest of our business model?  
How costly are they?

**EXAMPLES**  
Personal assistance  
Dedicated Personal Assistance  
Self-Service  
Automated Services  
Communities  
Co-creation

## Customer Segments



For whom are we creating value?  
Who are our most important customers?

Mass Market  
Niche Market  
Segmented  
Diversified  
Multi-sided Platform

## Key Resources



What Key Resources do our Value Propositions require?  
Our Distribution Channels? Customer Relationships?  
Revenue Streams?

**TYPES OF RESOURCES**  
Physical  
Intellectual (brand patents, copyrights, data)  
Human  
Financial

## Channels



Through which Channels do our Customer Segments want to be reached?  
How are we reaching them now?  
How are our Channels integrated?  
Which ones work best?  
Which ones are most cost-efficient?  
How are we integrating them with customer routines?

**CHANNEL PHASES**  
1. Awareness  
How do we raise awareness about our company's products and services?  
2. Evaluation  
How do we help customers evaluate our organization's Value Proposition?  
3. Purchase  
How do we allow customers to purchase specific products and services?  
4. Delivery  
How do we deliver a Value Proposition to customers?  
5. After sales  
How do we provide post-purchase customer support?

## Cost Structure



What are the most important costs inherent in our business model?  
Which Key Resources are most expensive?  
Which Key Activities are most expensive?

**IS YOUR BUSINESS MORE**  
Cost Driven (leanest cost structure, low price value proposition, maximum automation, extensive outsourcing)  
Value Driven (focused on value creation, premium value proposition)

**SAMPLE CHARACTERISTICS**  
Fixed Costs (salaries, rents, utilities)  
Variable costs  
Economies of scale  
Economies of scope

## Revenue Streams



For what value are our customers really willing to pay?  
For what do they currently pay?  
How are they currently paying?  
How would they prefer to pay?  
How much does each Revenue Stream contribute to overall revenues?

TYPES	FIXED PRICING	DYNAMIC PRICING
Asset sale	List Price	Negotiation (bargaining)
Usage fee	Product feature dependent	Yield Management
Subscription Fees	Customer segment dependent	Real-time-Market
Lending/Renting/Leasing	Volume dependent	
Licensing		
Brokerage fees		
Advertising		

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Eclipsecon Europe	21.10. – 24.10.2019	Ludwigsburg	<ul style="list-style-type: none"> <li>- Paper submitted</li> <li>- Community Day (Automotive) proposed</li> </ul>
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# OpenADx 50 Words for automotive flyer

- › About OpenADx
- ›
- › OpenADx is an Eclipse working group focused on accelerating the development of autonomous driving capabilities by providing the basis for interoperable tools and frameworks.
- ›
- › Experts from various domains - including automotive manufacturers, IT companies and technology providers - address the challenges of autonomous driving development by collaborating and innovating in an open environment to ensure seamless integration.

# OpenADx

## How can we attract the community?

- › Release Plan
  - › Eclipse iceoryx -> Mid / End of October initial contribution
  - › Eclipse Cloe -> initial contribution -> expected End of August
- › Events, we should show OpenADx
- › Recruiting more people/companies to come in
- › Meeting with all relevant new stakeholders
- › Get influencers like advisory boards