



*Software-Defined Vehicle Support and Coordination Project.*

# FEDERATE BB Repository & SDVoF vision

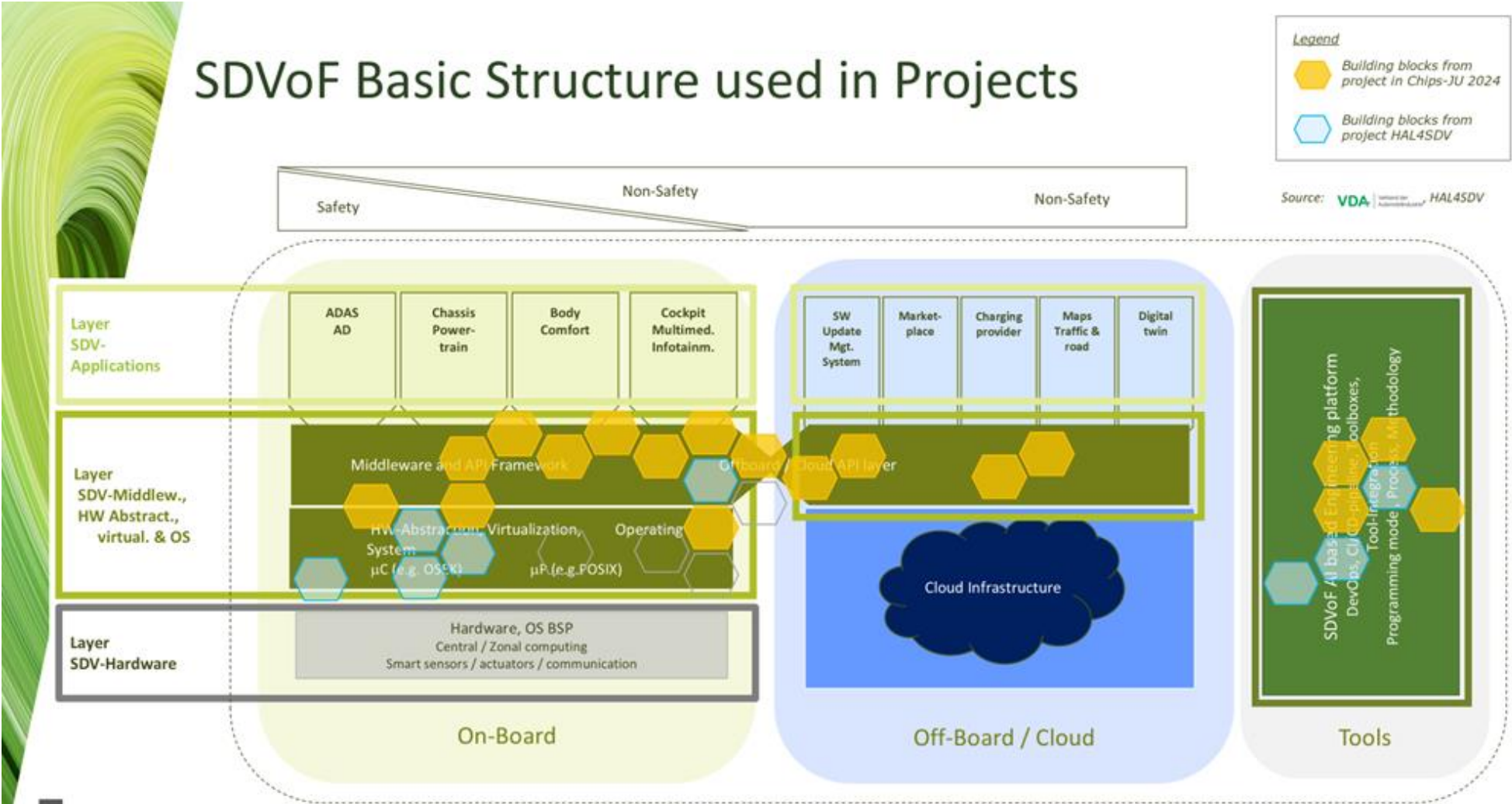
Mario Driussi  
Munich | 2025 05 20



# Agenda

- SDVoF vision
  - Motivation & Current Situation
  - FEDERATE SDVoF vision and Github
- What We Offer - and What We Expect
- FEDERATE approach & Github Repository
  - Live visit

# SDVoF vision



# Motivation & Current Situation

## Current

- Github Stats from 2023 (source: <https://en.wikipedia.org/wiki/GitHub>)
  - ~ 100 Million Developers
  - ~ 420 Million Repos
  - ~ 28 Million Public Repos

Number of Problems solved?

- Automotive context
  - Several Repos on different Hosts, Github, Gitlab, Bitbucket, Gitee, atomgit,...
- Overview ?
- Harmonization ?
- Collaboration ?
- ...

<https://gitlab.com/soafe>

<https://github.com/covea>

<http://b.c.m>

<http://.com/LiteOS>

[xc](#)

[undation/All OS-Things](#)

[ore-ai/SDV](#)

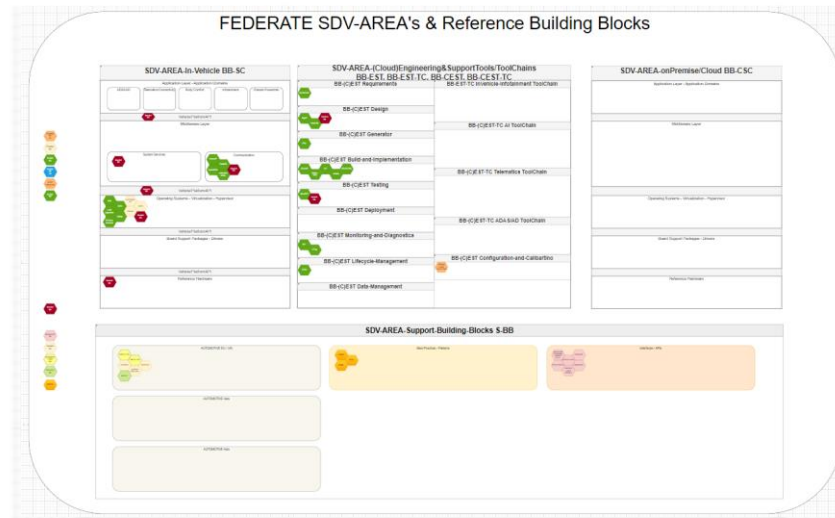


# SDVoF vision

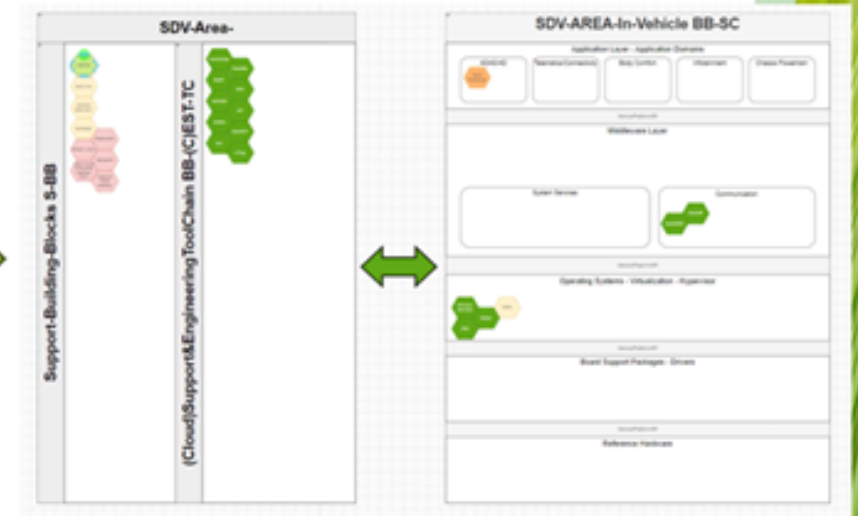
Collected BB-Descriptions  
in the structured GitRepo



Collected of BB-Descriptions  
mapped into the Reference Areas and  
Architectures



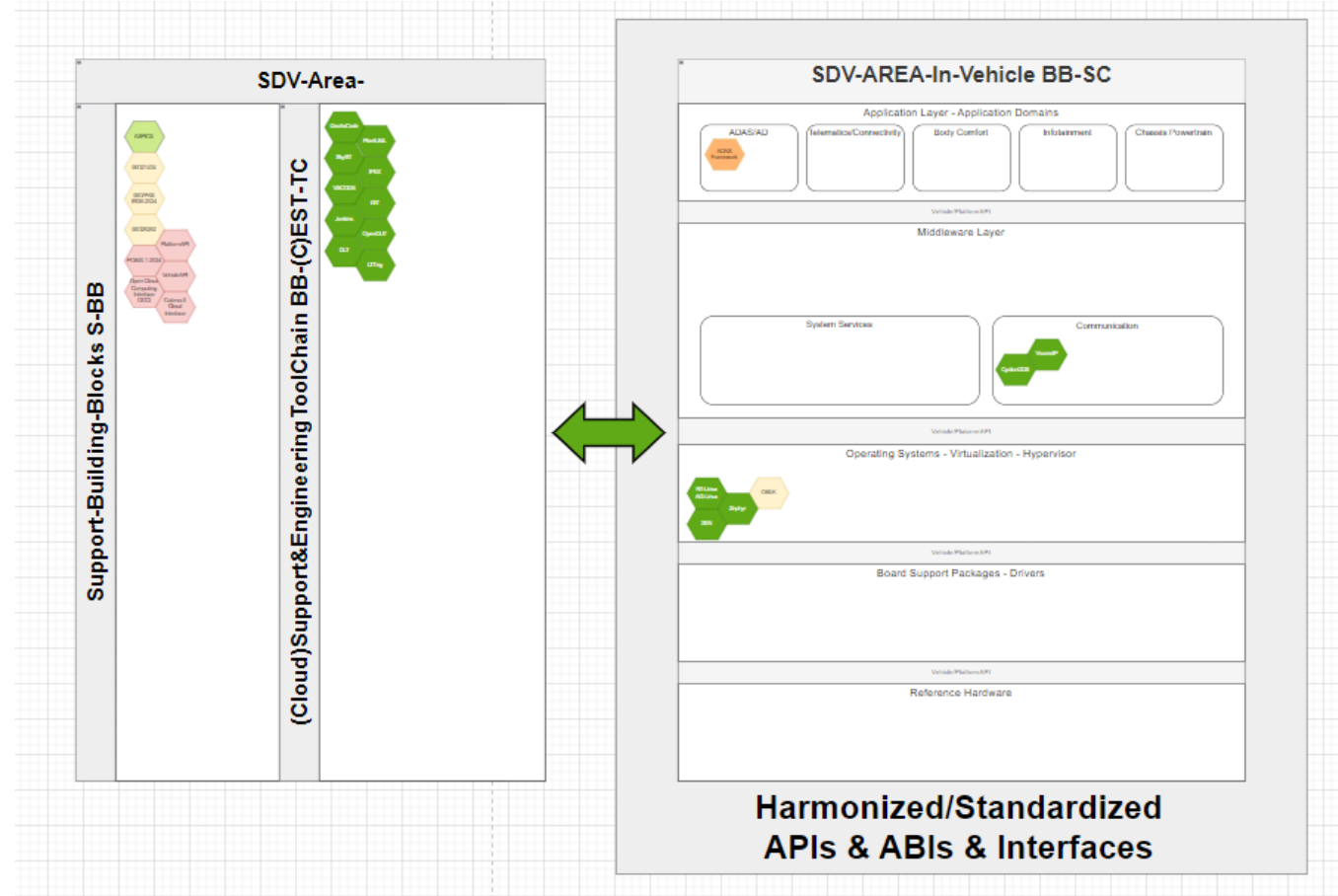
Selected BB-Descriptions  
with implementations (Tools,  
Processes, APIs, aligned Standards,  
Stack-Components – executed as one  
instance of the Reference Core Stack



SDV Ecosystem Framework

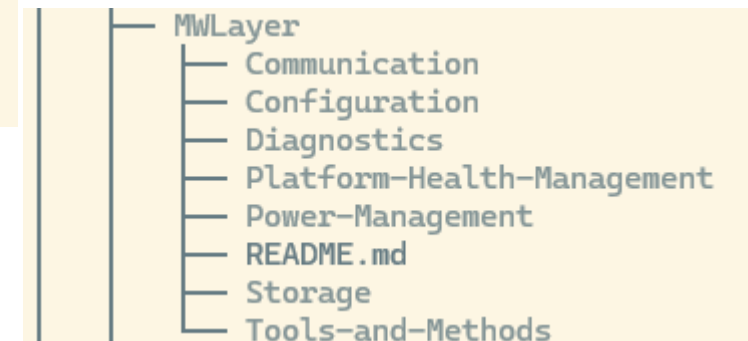
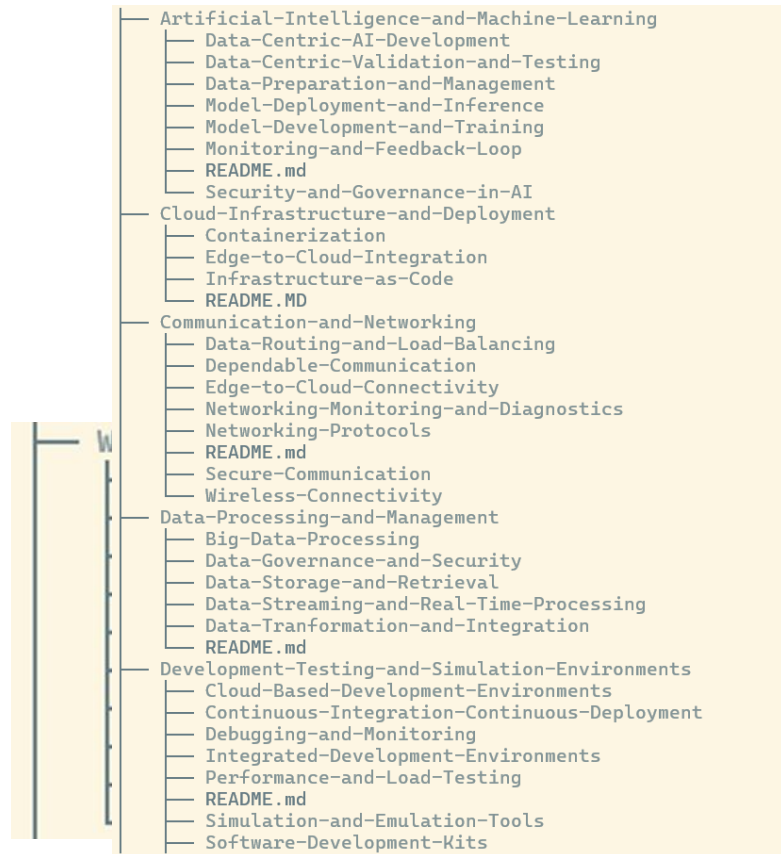
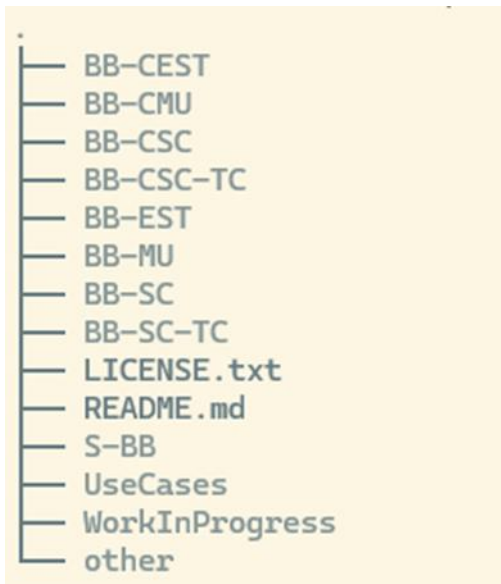
# SDVoF vision

"We offer a framework that enables stakeholders to connect and coordinate on APIs and Interface definitions."



# What We Offer

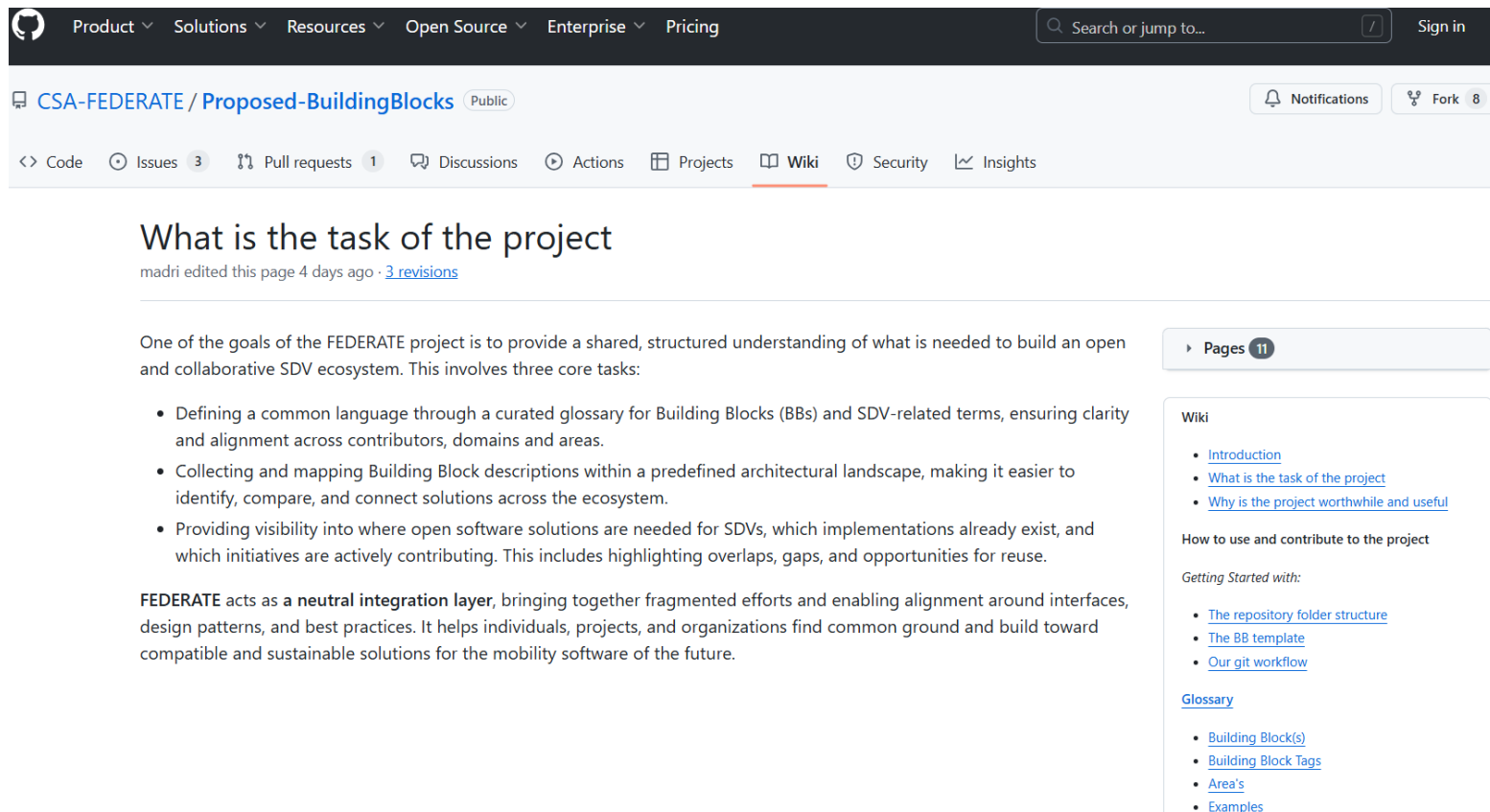
- Github Repo „as a central hub for getting oriented and keeping track of the big picture” – aligned with our definitions and BB-Tags





# What We Offer

- "A wiki that helps you navigate key terms through a comprehensive glossary and clear definitions."



The screenshot shows the GitHub interface for the CSA-FEDERATE repository. The top navigation bar includes links for Product, Solutions, Resources, Open Source, Enterprise, and Pricing, along with a search bar and a 'Sign in' button. Below this, the repository name 'CSA-FEDERATE / Proposed-BuildingBlocks' is displayed, along with 'Public' status, 'Notifications', and 'Fork 8' buttons. The main navigation bar includes links for Code, Issues (3), Pull requests (1), Discussions, Actions, Projects, Wiki (selected), Security, and Insights. The main content area is titled 'What is the task of the project' and shows that 'madri' edited the page 4 days ago with 3 revisions. The text describes the project's goal: to provide a shared, structured understanding of what is needed to build an open and collaborative SDV ecosystem, involving three core tasks:

- Defining a common language through a curated glossary for Building Blocks (BBs) and SDV-related terms, ensuring clarity and alignment across contributors, domains and areas.
- Collecting and mapping Building Block descriptions within a predefined architectural landscape, making it easier to identify, compare, and connect solutions across the ecosystem.
- Providing visibility into where open software solutions are needed for SDVs, which implementations already exist, and which initiatives are actively contributing. This includes highlighting overlaps, gaps, and opportunities for reuse.

**FEDERATE** acts as a **neutral integration layer**, bringing together fragmented efforts and enabling alignment around interfaces, design patterns, and best practices. It helps individuals, projects, and organizations find common ground and build toward compatible and sustainable solutions for the mobility software of the future.

On the right side, there is a sidebar with a 'Pages 11' button. Under the 'Wiki' section, there are links for 'Introduction', 'What is the task of the project', and 'Why is the project worthwhile and useful'. Below this, under 'How to use and contribute to the project', there is a 'Getting Started with:' section with links for 'The repository folder structure', 'The BB template', and 'Our git workflow'. At the bottom, under 'Glossary', there are links for 'Building Block(s)', 'Building Block Tags', 'Area's', and 'Examples'.



# - and What We Expect

- We welcome contributions in the form of Building Block descriptions-  
“where projects, initiatives, or organizations publicly share the (open) software Building Blocks they are contributing to the digital mobility landscape, helping to strengthen and grow the SDVoF initiative.”



The image shows a file explorer on the left and a code editor on the right. The file explorer displays a directory structure with folders like 'WorkInProgress', 'other', 'figures', 'glossary', 'scripts', 'technical\_description\_container', and 'utils'. The 'utils' folder is expanded, showing files: 'Abbreviations.md', 'BB\_Implementation\_guideline...', 'BB\_Template.md' (highlighted), 'README\_base.md', 'structure.md', 'structure\_wip.md', '.gitignore', 'LICENSE.txt', and 'README.md'. The code editor shows a template for a Building Block description with the following content:

```
14 <!-- example on how to use BB or link to documentation -->
15
16 ## Known Implementation
17
18 ## ID (unique name)
19
20 ## Description
21 <!-- General Description of the BB -->
22
23 ## Rationale
24 <!-- Explanation why we need the BB; what problem want to be solved -->
25
26 ## Governance Applicable S-BB(s)
27 <!-- Reference to e.g. UN/EU CRA Cyber Resilience Act; UNECE 156 - Software update and software update management system
28 Reference to defined S-BB(s)
29 Reference to e.g. ISO26262, AUTOSAR Spec. X -->
30
31 ## Compose BB(s)
32 <!-- Link to required BB(s)
33 E.g. BB-SC StateManagement
34 BB is a composition of other BBs -->
35
36 ## What is needed to Design and Implement
37 <!-- e.g. we expect to have a certain HW capability and or SW environment or Tool support, or a documentation, or an extri
38
```

# FEDERATE approach

- **A detailed look at our approach:**

- A wiki with consistent terminology and clear definitions for Building Blocks (BBs), BB-Tags, and Areas.
- A structured repository aligned with our reference architecture and terminology.
- A ready-to-use BB\_Template to guide your contribution.



# FEDERATE Github Repo

- <https://github.com/CSA-FEDERATE?tab=repositories>



# Thank you for your attention!

## Questions?





# Thank You

Email of the presenter:  
[mario.Driussi@v2c2.at](mailto:mario.Driussi@v2c2.at)

*The Project has been accepted for funding within the Key Digital Technologies Joint Undertaking (KDT JU) under Call HORIZON-KDT-JU-2023-3-CSA-IA / Grant Agreement No. 101139749*