



**CAMARA**

The Telco Global API Alliance

# Steering Committee

12.05.2022

# Agenda

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**01** Welcome new participants

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**02** Qorum given?

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**03** Project governance updates

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**04** Sub project status

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**05** Working group status

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**06** Proposals for API sub projects

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**07** AOB

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# Welcome new participants

## Public Github repository for CAMARA project



	MarkusKuemmerle Update PARTICIPANTS.MD	dce24f8 41 minutes ago	🕒 595 commits
📁	declarations	Update file-header.txt	15 days ago
📁	documentation	Update CAMARA Project - CNCF Project Proposal.md	12 days ago
📄	CODE_OF_CONDUCT.md	Update CODE_OF_CONDUCT.md	8 months ago
📄	CONTRIBUTING.md	Update CONTRIBUTING.md	12 days ago
📄	PARTICIPANTS.MD	Update PARTICIPANTS.MD	41 minutes ago
📄	ProjectCharter.md	Update ProjectCharter.md	11 days ago
📄	ProjectStructureAndRoles.md	Update ProjectStructureAndRoles.md	13 days ago
📄	README.md	Update README.md	12 days ago











1. Ensure that your email address is documented in your GitHub profile so that we can add you to the mailing list
2. Insert your name in the PARTICIPANTS.MD file and create a GitHub pull request

# Quorum given? Yes

AT&T	Wiley Wilkins (Barry Elia)	✓
Capgemini	Shamik Mishra	✗
Deutsche Telekom AG	Nathan Rader (Markus Kümmerle)	✓
Ericsson	Bart van Kaathoven (Jan Friman)	✓
Google Cloud	Sridhar Gollapudi	✗
GSMA	Henry Calvert	✓
IBM	Jason Hunt (Zyg Lozinski)	✓
Intel	Petar Torre	✓
Kandy	Philip Lintell (Ralph Page)	✓
KDDI	Toshiyasu Wakayama	✓
Microsoft	Landon Cox	✓
Nokia	Chris Jones (Tanja de Groot)	✓
ORANGE	Sylvain Morel	✓
Scenera	David Lee	✓
T-Mobile US	Lyle Bertz	✓
TIM	Roberto Procopio (Fabrizio Moggio)	✗
Telefonica	Juan Carlos Garcia (Jose A Ordonez Lucena)	✓
TELUS	Ali Tizghadam	✓
Vodafone	Johanna Wood	✓



# Project governance updates

	MarkusKuemmerle Update PARTICIPANTS.MD	dce24f8 41 minutes ago	 595 commits
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	README.md	Update README.md	12 days ago

Review the documents and provide feedback:

- Correct typos and bad grammar immediately in the files (and create a pull request)
- In case of needed content changes create a GitHub issue



# Project governance updates

## New release of marketing materials available

Presentation

# CAMARA

The Telco Global API Alliance

12.05.2022

**CAMARA**  
The Telco Global API Alliance

### Enable seamless access to 4G/5G network capabilities

4G/5G network capabilities exposed through APIs provide a large benefit for customers. By hiding telco complexity behind APIs and making the APIs available across telco networks and countries, CAMARA enables an easy and seamless access.

4G/5G network capabilities are functions partly available already in 4G but new and much more powerful in the 5G network. These functions enable to get information out of the network but also to configure the network. The on-demand, secure and controlled exposure of these capabilities pave the way for transforming operator networks into service enablement platforms, facilitating the application-to-network integration, which will be key to deliver enhanced and service-tailored customer experience in the 5G era.

**Abstraction** from Network APIs to Service APIs is necessary:

- To hide telco complexity making APIs easy to consume for customers with no telco expertise (user-friendly APIs)
- To fulfil data privacy and regulatory requirements
- To facilitate application to network integration

**CAMARA** is an open source project within Linux Foundation to define, develop and test the APIs. CAMARA works in close collaboration with the GSMA Operator Platform Group to align API requirements and publish API definitions and APIs. Harmonization of APIs is achieved through fast and agile created working code with developer-friendly documentation. API definitions and reference implementations are free to use (Apache2.0 license).

**Availability** across telco networks and countries is necessary:

- To ensure seamless customer experience
- To accelerate technology development and commercial adoption (minimize implementation effort)
- To accelerate education and promotion
- To support application portability

Logos of member companies: accenture, amdocs, AT&T, Capgemini, ERICSSON, Google Cloud, GSMA, IBM, intel, KANDY, KDDI, MAVENIR, Microsoft, NOKIA, Open Sesame, orange, NGMN, SCENERA, TIM, Telefonica, TELUS, THE LINUX FOUNDATION, T Mobile, and vodafone.

Documents are available here:  
<https://github.com/camaraproject/WorkingGroups/tree/main/MWC/documentation/MarketingMaterial>

# Project governance updates

## Document status – Decision Option 1

<Sub Project>

- 0\_supporting\_documents
- 1\_contributions
  - code
  - definitions
  - documentation
- 2\_working
  - code
  - definitions
  - documentation
- 3\_deliverables
  - code
  - definitions
  - documentation
- 9\_administration

<Working Group>

- 0\_supporting\_documents
- 1\_contributions
  - documentation
- 2\_working
  - documentation
- 3\_deliverables
  - documentation
- 9\_administration

Vote will be submitted to decide

Option 1:  
Change folder structure according these templates to reflect the document status, document this regulation in ProjectStructureAndRoles.md

- GitHub issue #43
- GitHub issue #47
- GitHub issue #48

# Project governance updates

## Document status – Decision Option 2

<Filename>\_<status>\_<version>.<ending>

status:

- “CON” – contribution
- “WIP” – work in progress
- “RTR” – ready for review
- “DEL” – deliverable

version:

- V<x>.<x>.<x>

Vote will be submitted to decide

Option 2:  
Include the document status (and version) in the file names of API descriptions, API code, API documentation (not administrative files), document this regulation in ProjectStructureAndRoles.md

GitHub  
issue #43

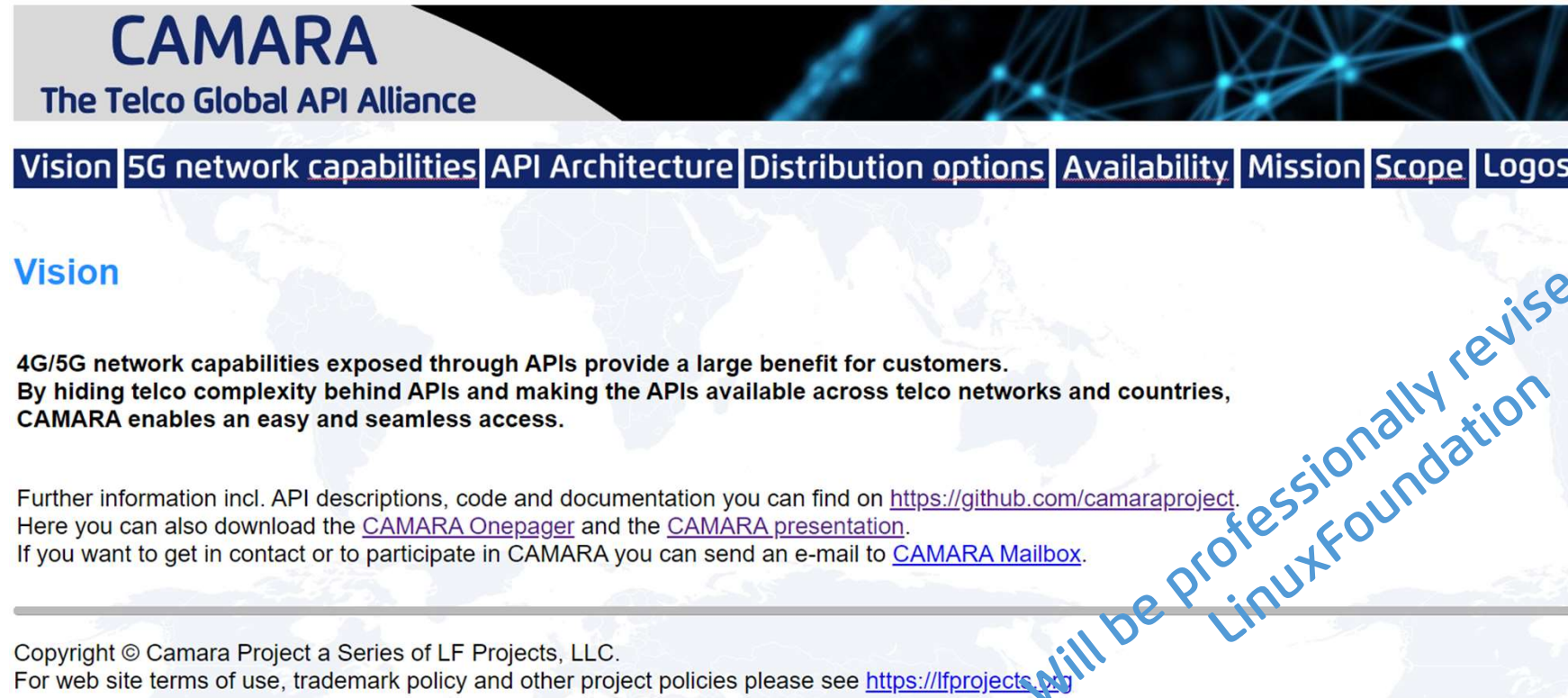
GitHub  
issue #47

GitHub  
issue #48



# Project governance updates

## CAMARA website available



The screenshot shows the top section of the CAMARA website. At the top is a dark blue header with the word "CAMARA" in large white letters and "The Telco Global API Alliance" in smaller white letters below it. Below the header is a navigation bar with a light blue background and dark blue text. The navigation bar contains the following links: "Vision", "5G network capabilities", "API Architecture", "Distribution options", "Availability", "Mission", "Scope", and "Logos". Below the navigation bar is a section titled "Vision" in blue text. The "Vision" section contains the following text: "4G/5G network capabilities exposed through APIs provide a large benefit for customers. By hiding telco complexity behind APIs and making the APIs available across telco networks and countries, CAMARA enables an easy and seamless access." Below this text is a paragraph of further information: "Further information incl. API descriptions, code and documentation you can find on <https://github.com/camaraproject>. Here you can also download the [CAMARA Onepager](#) and the [CAMARA presentation](#). If you want to get in contact or to participate in CAMARA you can send an e-mail to [CAMARA Mailbox](#)." At the bottom of the screenshot is a footer with the following text: "Copyright © Camara Project a Series of LF Projects, LLC. For web site terms of use, trademark policy and other project policies please see <https://lfprojects.org>".

**CAMARA**  
The Telco Global API Alliance

[Vision](#) [5G network capabilities](#) [API Architecture](#) [Distribution options](#) [Availability](#) [Mission](#) [Scope](#) [Logos](#)

### Vision

4G/5G network capabilities exposed through APIs provide a large benefit for customers. By hiding telco complexity behind APIs and making the APIs available across telco networks and countries, CAMARA enables an easy and seamless access.

Further information incl. API descriptions, code and documentation you can find on <https://github.com/camaraproject>. Here you can also download the [CAMARA Onepager](#) and the [CAMARA presentation](#). If you want to get in contact or to participate in CAMARA you can send an e-mail to [CAMARA Mailbox](#).

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For web site terms of use, trademark policy and other project policies please see <https://lfprojects.org>




Website is available here:  
<https://camaraproject.github.io/index.html>  
<https://camaraproject.org>

# Project governance updates

## CAMARA mailing list

Currently a mailing list for CAMARA doesn't exist. GitHub functions are not sufficient. Shall CAMARA use one of the free email services?

- Check if joint solution with GSMA is possible
- Check free email service options
- Present solution in next steering committee to decide

PROVIDER	WHAT'S INCLUDED FOR FREE?	COMMENTS
MailerLite 	<ul style="list-style-type: none"><li>• 1,000 subscribers</li><li>• 12,000 emails p/m</li><li>• Automations, landing pages and reports</li></ul>	MailerLite offer a decent amount of features on its free plan. This includes <b>autoresponders</b> , sophisticated web forms, (limited) reporting and email support. There are only basic structural templates included, however. ( <a href="#">Read our full review</a> )
Sender 	<ul style="list-style-type: none"><li>• 2,500 subscribers</li><li>• 15,000 emails p/m</li><li>• Autoresponders + transactional emails</li><li>• Push notifications</li><li>• Forms</li></ul>	This simple and easy-to-use email marketing tool includes a sizeable sending allowance and some handy extras like automations and push notifications.
Moosend 	<ul style="list-style-type: none"><li>• 1,000 subscribers</li><li>• Unlimited emails</li><li>• All features included</li><li>• No Moosend branding in emails</li></ul>	In terms of extras, this is probably one of the more generous free plans we've seen, with access to nearly all areas of the tool (landing pages and team accounts not included). It's also the only tool we've tested that doesn't include its own branding in your emails. ( <a href="#">Read our full review</a> )
MailChimp	<ul style="list-style-type: none"><li>• 2,000 subscribers</li></ul>	You have restricted features available on the free account (e.g. no advanced

# Project governance updates

## OPAG representation of CAMARA



Nomination of candidates until next meeting:

Please include your proposals here:

[https://github.com/camaraproject/rep\\_main/blob/main/documentation/MeetingMinutes/OPAG\\_Representation.md](https://github.com/camaraproject/rep_main/blob/main/documentation/MeetingMinutes/OPAG_Representation.md)



# Sub project status

## “Quality on Demand”

### Scope:

- Service APIs for “Quality on Demand” (see APIBacklog.md)
- It provides the customer with the ability to:
  - set quality for a mobile connection (e.g., required latency, jitter, bit rate)
  - get notification if network cannot fulfill
  - NOTE: The scope of this API family should be limited (at least at a first stage) to 4G and 5G.
- Specify, develop, document and test the APIs (with 1-2 Telcos)
- Schedule: from now to 30.06.2022
- Location: virtually

### Team / Maintainers:

- DT: Shilpa Padgaonkar, M. Jarzab, M. Sozanski, N. Wirzius, F. Dsouza
- Intel: Petar Torre, Francesc Guim
- Telefonica: José Antonio Ordoñez Lucena
- Telus: Ali Tizghadam
- Ericsson: Emil Zhang, Jan Friman, Joachim Dahlgren
- KDDI: Toshi Wakayama
- Orange: Sylvain Morel, Patrice Conil, Julien Giannandrea
- Vodafone: Eric Murray, Kevin Smith, Ivan Nieto

Repository (incl. first draft API specs): <https://github.com/camaraproject/QualityOnDemand>

GitHub  
issue #12

GitHub  
issue #7

GitHub  
issue #8

GitHub  
issue #1

GitHub  
issue #2

GitHub  
issue #3

GitHub  
issue #4

GitHub  
issue #5

GitHub  
issue #6

GitHub  
issue #9

GitHub  
issue #11

Meeting minutes  
in the repository

# Sub project status

## “Quality on Demand”

Deliverable	Required/Optional (R/O)	Current status
API Definition	R	Done
API doc/user stories/testcases	R	Commonalities' relevant templates have been delivered – Internal DT review on-going for QoD API (User Story + Spec)
Implementation	O	In clarification: <ul style="list-style-type: none"><li>• Verifying reference NEF implementation applicability</li></ul>
API Reviews and extensions		<ul style="list-style-type: none"><li>• Reviews from WG members discussed and worked on using issues in Github.</li><li>• Proposal for QoS profiles finalized</li></ul>

MILESTONE #2



# Working group status

## “Commonalities for APIs”

### Scope:

- Work out “Commonalities for APIs”
- Schedule: from now to 30.06.2022
- Location: virtually

### Team / Contributors:

- DT: Shilpa Padgaonkar, Mariusz Sozanski, Marcin Jarzab
- Telefonica: Jose Ordoñez-Lucena, Ruben Barrado Gonzalez
- Intel: Petar Torre, Francesc Guim
- Ericsson: Jan Friman, Miguel A. García-Martín
- KDDI: Toshi Wakayama
- Orange: Sylvain Morel, Olivier Mathieu
- TIM: Fabrizio Moggio
- Vodafone: Kevin Smith, Eric Murray, Ivan Nieto
- AT&T: Shahram Mohajeri
- GSMA: Faisal Zia, Tom van Pelt, Mark Cornall
- Accenture: Adriano Poloni, Giuseppe Di Nuccio

### Repository

- <https://github.com/camaraproject/WorkingGroups/tree/main/Commonalities>

Meeting minutes  
in the repository

GitHub issue #1	GitHub issue #3
GitHub issue #4	GitHub issue #5
GitHub issue #8	GitHub issue #10
GitHub issue #13	GitHub issue #25
GitHub issue #26	GitHub issue #27
GitHub issue #31	GitHub issue #32
GitHub issue #33	GitHub issue #35
GitHub issue #36	GitHub issue #37

# Working group status

## “Commonalities for APIs”

Deliverable	Format	Main Contributor	Current status
User story template	Word	Telefónica	Review closed Document accepted
API documentation template	Markdown	DT	Review closed Document accepted
API readiness minimum criteria checklist	Markdown	All	Review to be <b>closed</b>
General principles doc (Incl. software engineering process)	PDF => Markdown	Telefónica All	Review in progress
Authentication and Authorization concept doc	Markdown	DT E///	<b>Review closed</b> <b>Document accepted</b>
Testing principles doc	Markdown	DT	Draft in preparation
Exposure gateway reference solution doc	Word	Telefónica	Review to be <b>closed</b>
Standard resource description doc (Glossary)	Markdown	All	To be started
NEF reference solution	Source code	Intel	Checking applicability
Dedicated portal instance for Camara	<i>Platform</i>	Telefónica	Requirements documented Decision to be taken

MILESTONE #1  
REACHED

MILESTONE #2

# Working group status

## “API Backlog”

### Scope:

- Include contribution from OPAG and from Ericsson
- Schedule: from now to 30.06.2022
- Location: virtually

### Team / Contributors

- Deutsche Telekom: Noel Wirzius, Marcin Jarzab
- Ericsson: Jan Friman
- KDDI: Toshi Wakayama
- Scenera: Andrew Wajs
- Telefonica: Jose Ordonez-Lucena, Rubén Barrado González
- Vodafone: Kevin Smith, Eric Murray, Ivan Nieto

### Repository

- <https://github.com/camaraproject/WorkingGroups/tree/main/APIBacklog>

Kick off done today

GitHub  
issue #2

GitHub  
issue #12

GitHub  
issue #19

GitHub  
issue #20

GitHub  
issue #21

GitHub  
issue #29

GitHub  
issue #30

# Proposals for API Sub Projects



Vodafone will send a proposal for

- Customer identification
- Roaming status

## Edge Cloud Sub Project



Telus will send a proposal/contribution for

- Sovereign route
- Emergency response API family
- Edge Cloud APIs

Slides presented in the call are here:

<https://github.com/camaraproject/EdgeCloud/blob/main/documentation/EdgeCloud%20Group.pdf>



**CAMARA**

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A0B