



**CAMARA**

The Telco Global API Alliance

# Steering Committee

July 14<sup>th</sup> 2022

14.07.2022

# 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

5GFF	Janine Grasso (Miguel Carames, Kevin Smith)	✓
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 Ordenez Lucena)	✓
TELUS	Ali Tizghadam (Shalin Hudda)	✓
Vodafone	Johanna Wood	✓



# Project governance updates

	MarkusKuemmerle Update PARTICIPANTS.MD	dce24f8 41 minutes ago	 595 commits
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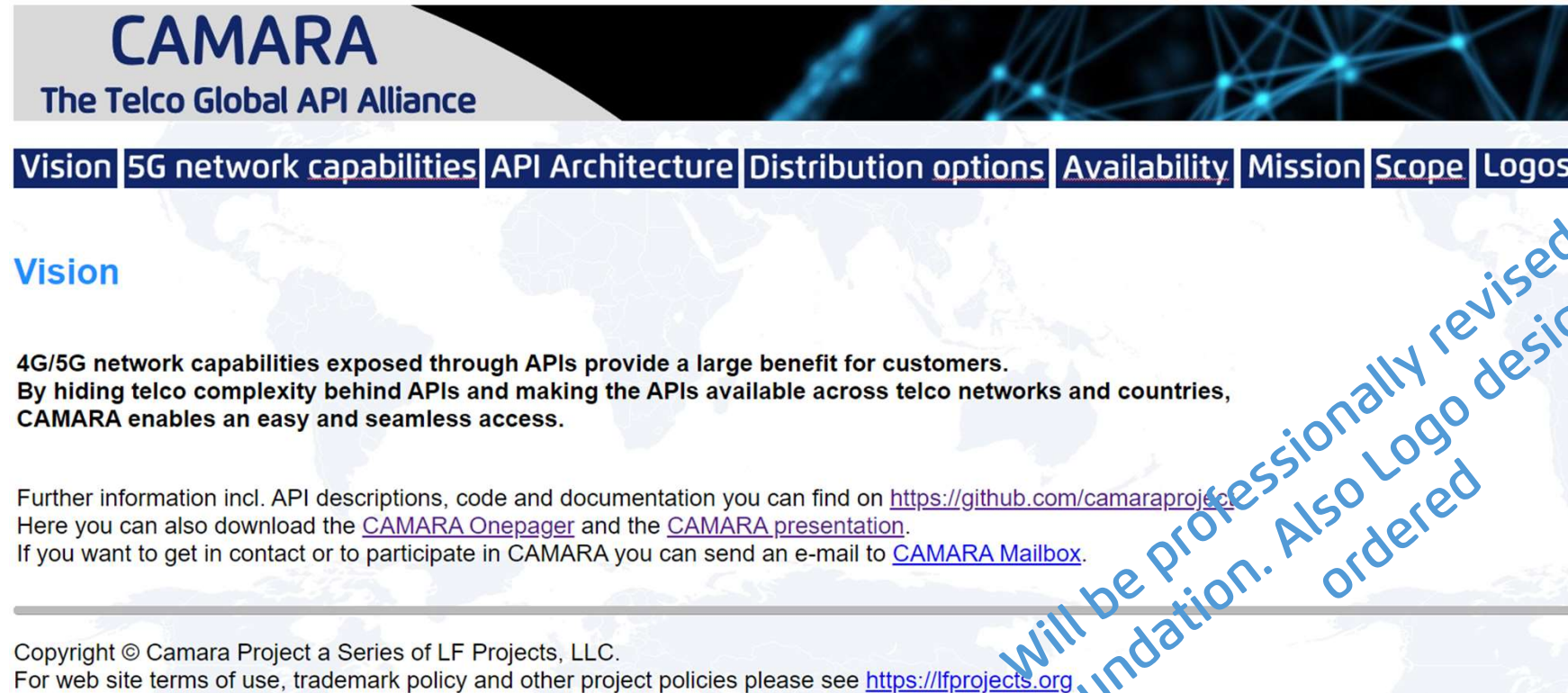
Review the documents and provide feedback:

- 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

## CAMARA website available



The screenshot shows the top part of the CAMARA website. The header features the CAMARA logo and the tagline 'The Telco Global API Alliance'. Below this is a navigation bar with links to Vision, 5G network capabilities, API Architecture, Distribution options, Availability, Mission, Scope, and Logos. The 'Vision' section is highlighted, containing text about 4G/5G network capabilities and links to further information, including a GitHub repository, a one-pager, a presentation, and a mailbox. A copyright notice and a link to the project policies are at the bottom of the page.

**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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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>

Website is available here:

<https://camaraproject.github.io/index.html>

<https://camaraproject.org>

# Project governance updates

## CAMARA mailing list

A mailing list for CAMARA is now implemented. Please accept the invitation!



In a second step then we are able to create additional lists for the steering committee, and one for each sub project and each working group.

**From:** Group Notification <[all+invite+3548748879367962721+4509890@lists.camaraproject.org](mailto:all+invite+3548748879367962721+4509890@lists.camaraproject.org)>  
**Date:** Tuesday, July 5, 2022 at 12:49 PM  
**To:** Rader, Nathan <[Nathan.Rader@telekom.de](mailto:Nathan.Rader@telekom.de)>  
**Subject:** [all] Invitation to join the [all@lists.camaraproject.org](mailto:all@lists.camaraproject.org) group

Hello,

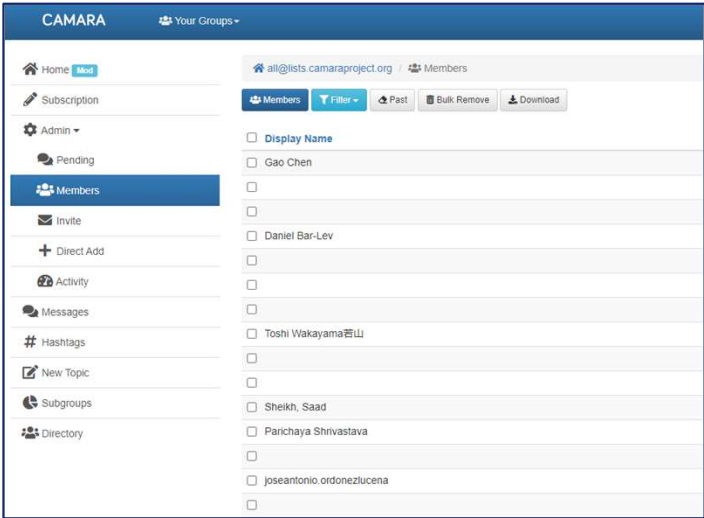
You have been invited by Markus Kuemmerle to join the Camara Project group [all@lists.camaraproject.org](mailto:all@lists.camaraproject.org).

If you have questions about this invitation, send them to [all+owner@lists.camaraproject.org](mailto:all+owner@lists.camaraproject.org).

To accept the invitation, please reply to this email, or you may [accept the invitation](#) on the website. This link will expire in 14 days, on 07/19/2022 at 10:48am UTC.

If you are not interested, or if [Nathan.Rader@telekom.de](mailto:Nathan.Rader@telekom.de) is not your email address, please ignore this email.

The Camara Project Team



# 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)





# Project governance updates

## MWC Las Vegas – With CAMARA personal event?

### MWC Las Vegas 2022



September 28-30, 2022

**Start:** Wednesday 28 September 2022 09:00

**End:** Friday 30 September 2022 17:00

**Venue:** Las Vegas Convention Center

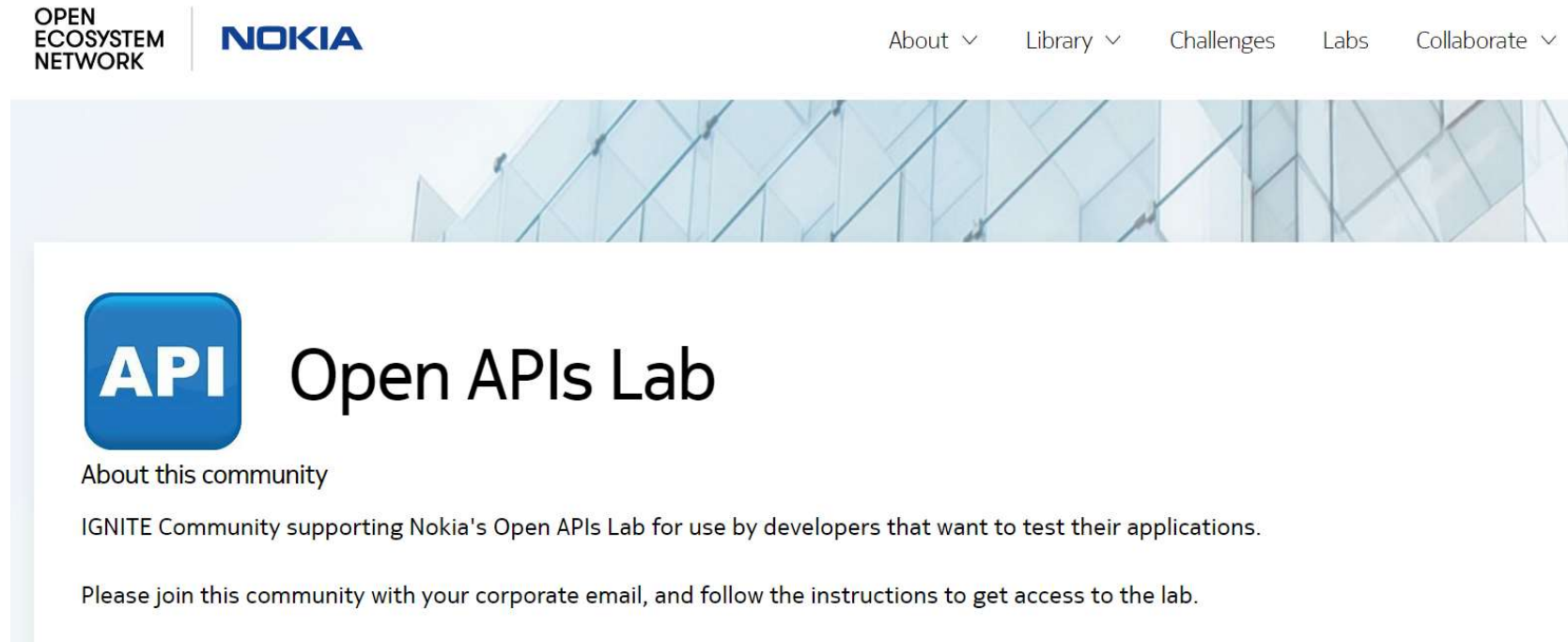
**Location:** Las Vegas

# Nokia Open APIs Lab

Nokia makes its Open APIs Lab community and its underlying Open5GLab accessible to CAMARA participants for testing the CAMARA API reference implementations

This Community provides

- Lab information
- Registration for 5G Lab access
- API specifications
- Sample code



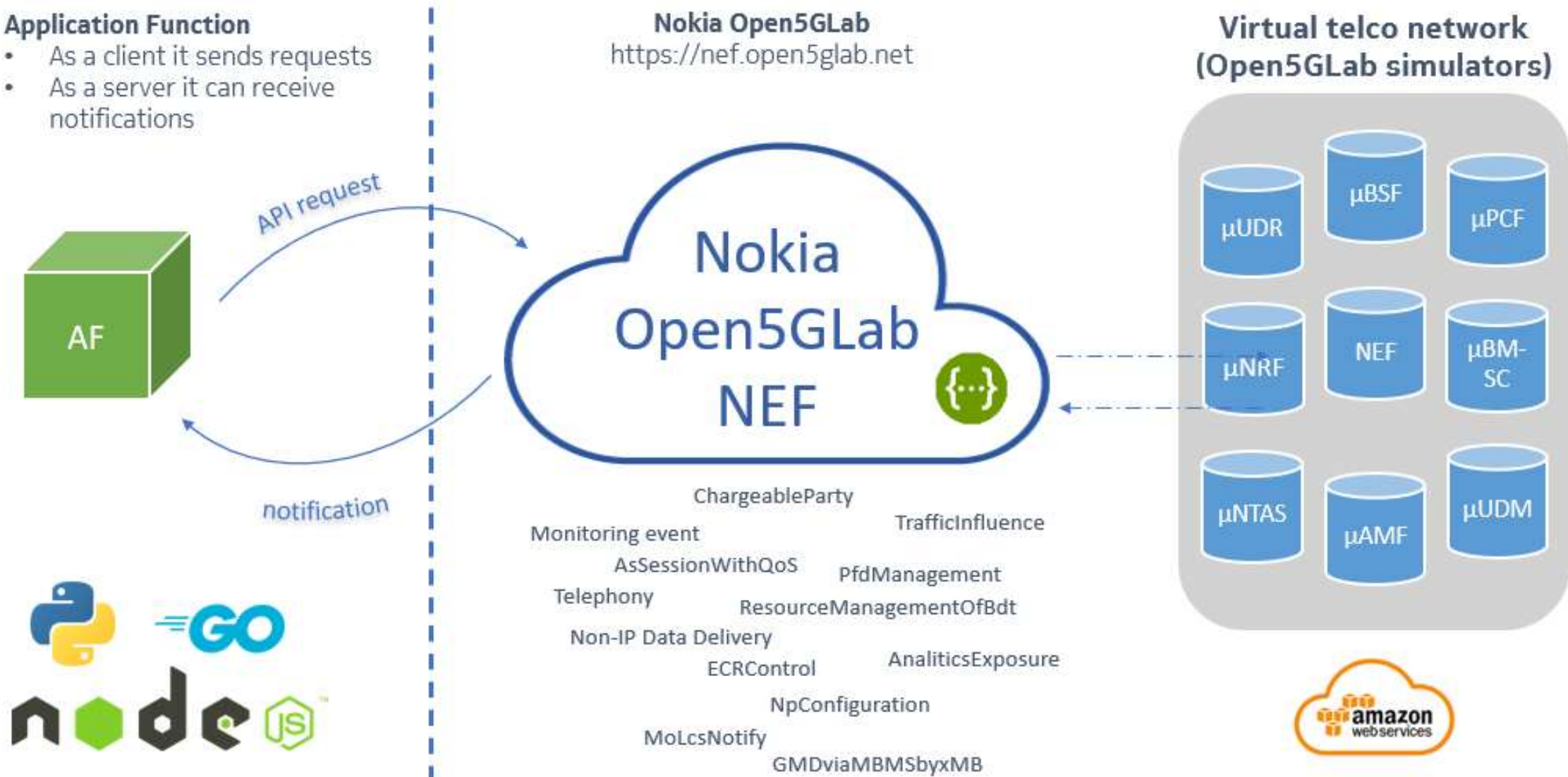
We will open up the registration shortly.

# Nokia's Open5GLab (in Open APIs Lab community)

## - designed for 5G App prototyping

### Application Function

- As a client it sends requests
- As a server it can receive notifications



# Open APIs Lab

## APIs, Lab and sample code access

### APIs

To see the APIs click the button.

NOTE: to switch to another API, you can select it using the top right selector box once you are on the API page

See the API specs

### API access

You can find details of the available APIs above, but the real fun begins when you register for our NEF running on the cloud on top of a simulated 5G Core network and start to experiment.

- Try the APIs without writing a single line of code.
- Run your own app using the simulated network.

Get API key </>

Register by clicking the button to get the credentials allowing your application to access the NEF APIs.

In the registration email, please provide your team or organization name, your purpose for accessing the lab and, most importantly, your application short name, e.g. "app123".



# 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
- BT : Milan Lalovic (OPAG observer)

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

GitHub  
issue #12

GitHub  
issue #7

GitHub  
issue #13

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 <ul style="list-style-type: none"><li>• Internal DT review completed QoD API (User Story + 2 API's doc)</li><li>• 3 Pull requests on GitHub</li></ul>
Implementation	R	<ul style="list-style-type: none"><li>• Code refactoring ongoing (adaption to Nokia NEF and ensure that it follows open source rules), contribution until end of July</li></ul>
API Reviews and extensions		<ul style="list-style-type: none"><li>• <b>Issue #13</b> : Enhance QoD API with "Flow Description" already defined in 3GPP NEF<ul style="list-style-type: none"><li>○ Discussed in community and DT organization</li><li>○ Based on agreement further decisions/steps will be defined</li></ul></li></ul>

MILESTONE #2

# Sub project status

## “Edge Cloud”

GitHub  
issue #14

### Scope:

- Service APIs for “Edge Cloud” (see APIBacklog.md)
- A (family of) APIs providing the customer with the ability to:
  - Onboard and manage application images to be deployed on resources within the operator network.
  - Use reserved compute resources within the operator network for the deployment of applications on VMs or containers
  - NOTE: The scope of this API family should be limited (at least in the short term) to 4G and 5G.
- Describe, develop, document and test the APIs (with 1-2 Telcos)
- Schedule: from now to 31.12.2022
- Location: virtually (Tue, 16-17 CET/CEST)

### Team / Maintainers:

- |  |  |
|--|--|
| • Broadpeak: Tuan Tran, Christoph Neuman | • Nabstract: Babu  |
| • Capgemini: Deepak Gunjal               | • Orange: Alexandru Ciinaru, Sylvian Morain              |
| • DT: Yamina Kelm, Shilpa Padgaonkar     | • Scenera: Andrew Wajs                                   |
| • GSMA: Tom Van Pelt, Mark Cornall       | • TEF: Aure Martinez, Alex Harmand, Jose Ordonez         |
| • Intel: Larry Horner                    | • TIM: Fabrizio Moggio, Marco Signorelli, Raffaele P.    |
| • KDDI: Toshi Wakayama                   | • VF: Eric Murray  |
| • MSFT: Landon Cox                       | • 5GFF: Kevin, Senthooor, Brett, Syed, Mashesh, Raghuram |

Repository: <https://github.com/camaraproject/EdgeCloud>

Meeting minutes  
in the repository

# Sub project status

## “Edge Cloud”

### API contributions so far

API	Owner	YAML available?
MEC exposure and experience management API	5GFF	Y
Simple edge discovery API		
Application Artifacts Management API	Capgemini, DT, Orange, TEF, TIM	N
Application Provider Resource Management API		
Application Onboarding Management API		
Application Instance Lifecycle Management API		
Code of former MobileEdgeX (planned)	Open Source	Y

### Next steps

- Providing YAML files for the last four APIs.
- Looking for synergies and touchpoints between APIs, avoid redundancy / overlappings
- Elaborate on user stories following ‘user story template’ agreed in Commonalities WG.



# Working group status

## “Commonalities for APIs”

### Scope:

- Work out “Commonalities for APIs”
- Schedule: from now to end of 2022
- Location: virtually

### Team / Contributors:

- DT: Shilpa Padgaonkar, Mariusz Sozanski
- 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
- Broadpeak: Christoph Neumann

### Repository

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

Meeting minutes  
in the repository

GitHub issue #1	Closed GitHub issue #3
GitHub issue #4	
GitHub issue #8	Closed GitHub issue #10
GitHub issue #26	
GitHub issue #31	GitHub issue #32
GitHub issue #33	

# 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 <b>closed</b> <b>Document accepted</b>
General principles doc (Incl. software engineering process)	PDF => Markdown	Telefónica All	Update in progress
Authentication and Authorization concept doc	Markdown	DT E///	<b>Review closed</b> <b>Document accepted</b>
Testing principles doc	Markdown	DT	Draft to be uploaded
Exposure gateway reference solution doc	Word	Telefónica	Review <b>closed</b> Document accepted
Standard resource description doc (Glossary)	Markdown	All	Document template Added
NEF reference solution	Source code	Nokia	<b>First solution made available for initial testing by Nokia.</b>
Dedicated portal instance for Camara	<i>Platform</i>	Telefónica	Requirements documented Decision to be taken

# Working group status

## “API Backlog”

### Scope:

- Defining and maintaining the list of APIs to be developed in CAMARA
  - API information include 1) API owner, 2) usability on selected use cases, 3) rough list of
  - Backlog elaborated based on: 1) OPAG priorities for the NBI and 2) CAMARA contributors
  - Journey from “API backlog WG” to “API family WG” captured in the next slide.
- Schedule: from now to 31.12.2022
- Location: virtually (bi-weekly, Thu, 15-16 CET/CEST)

### Team / Contributors

- Deutsche Telekom: Noel Wirzius, Marcin Jarzab
- Ericsson: Jan Friman, Miguel Garcia
- 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>

GitHub issue #2	GitHub issue #12
GitHub issue #19	GitHub issue #20
GitHub issue #21	GitHub issue #29
GitHub issue #30	GitHub issue #43
GitHub issue #44	GitHub issue #45
GitHub issue #47	GitHub issue #48

Meeting minutes  
in the repository

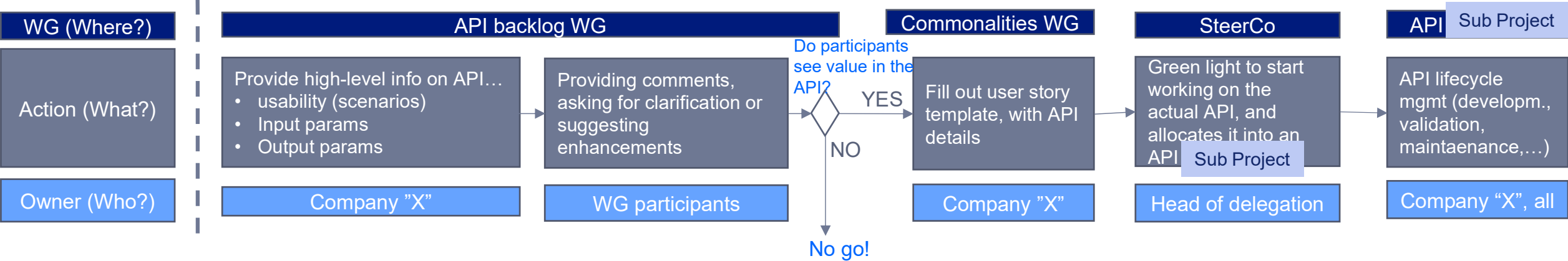
# Working group status

## “API backlog”

### APIs in discussion

API	Owner	Github Issue
Request Network Status Traffic API	Scenera	#29
Roaming status API	Vodafone	#43
Device Identifier API	Vodafone	#44
Anonymised Subscriber Identifier API	Vodafone	#45
Device Prioritization in WiFi API	TEF	#48

### Journey from “API backlog WG” to “API family WG”





# Proposals for API Sub Projects

DT would like to start working on another 2 API families:

- Device status: This API checks if a device is losing connection to the network or gets reachable again, and the roaming status.
- Device location: This API checks the location of a device.

Decision of Steering Committee needed to implement another 2 Sub Projects in the CAMARA repository.

**Decided**

All partners are invited to join these activities.



# Proposals for API Sub Projects



Vodafone will send a proposal for

- Customer identification
- Roaming status



Telus will send a proposal/contribution for

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



**CAMARA**

The Telco Global API Alliance

A0B