



**Value and Impact through Synergy, Interaction and coOperation of Networks
of AI Excellence Centres**

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**Platform designed and launched, Platform impact evaluation
and sustainability designed**

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Executive Summary

This document describes the mechanisms of creating a joint communication platform that will facilitate the communication within as well as between the ICT-48 networks with the potential for the extension beyond the ICT-48. After a deep assessment of existing solutions and on the other hand also main features that shall meet the stakeholders' requirements such as wide acceptance, scalable open solution, full hosting in Europe of both data and critical infrastructure, the Mattermost installation in Inria's server has been agreed on, implemented and put into operation to enrich the AI4EU platform with interactive communication tool.

List of Abbreviations

AI	Artificial Intelligence
AI4EU	European Artificial Intelligence On-Demand Platform and Ecosystem
API	Application Programming Interface
CIIRC CTU	Czech Institute of Informatics, Robotics and Cybernetics at the Czech Technical University
CSA	Coordination and Support Action
DNS	Domain Name System
EC	European Commission
GDPR	General Data Protection Regulation
ICT48	H2020-ICT-48-2020, Towards a vibrant European network of AI excellence centres
Inria	Institut national de recherche en sciences et technologies du numérique, National Institute for Research in Digital Science and Technology
NoE	Network of Excellence, referring to ICT48 consortia
R&I	Research and Innovation
ULEI	Leiden University

1. Introduction

VISION - Value and Impact through Synergy, Interaction and coOperation of Networks of AI Excellence Centres - is a coordination and support action (CSA) financed by the European Commission through the Horizon 2020 programme under the call for proposal H2020-ICT-48-2020. It has been proposed by a consortium of nine organisations coordinated by the University of Leiden (ULEI) and will last 36 months from September 2020.

The aim of the VISION project is to reinforce, interconnect and mobilise Europe's AI community and to orchestrate and accelerate Europe's transition to a world-leading position in the research, development and deployment of AI technologies.

Purpose of the document

This document "*D2.1 Platform designed and launched, Platform impact evaluation and sustainability designed*" is a deliverable of the Work Package No. 2 "*Mobilizing the European AI community*", task T2.2 "*European AI community development, communication tools (M1-M6)*" under the task lead of CIIRC CTU.

The document describes the deliberations, prerequisites, and selection of final solution that shall lead to the establishment of an effective and functional communication platform for facilitation of the cooperation and communication between Europe's AI networks of excellence (ICT48-NoEs), the AI research community at large, and other stakeholders across diverse areas of AI. As a matter of fact, the AI-on-demand platform (AI4EU platform) has been considered as the primary nucleus for fostering effective collection and exchange of knowledge, best practices, methods, tools, and data between the NoEs and European AI community.

After exploring the existing possibilities and investigating all relevant features, a Mattermost portal has been recommended as the most convenient and tangible solution enriching the AI4EU platform with communication and interaction functionalities. The document also contains the design of mechanisms and user management that shall be carried out in close cooperation with designated representatives of the ICT48-NoEs to make use of the communication platform broadly.

Document structure

The document is structured as follows:

- *Chapter 2*: describes the main objectives and requirements that were essential for the analysis of existing solutions;
- *Chapter 3*: describes the analysis of existing communication tools and the path that led to the selected solution;
- *Chapters 4 - 6*: outline the overall technical solution, data security issues as well as the most important features for smooth user management;
- *Chapter 7*: suggests an initial structure of the platform;
- *Chapter 8*: presents next steps - factual launch of the event, further communication as well as a survey that shall be conducted for the development of the platform and best practice sharing.

2. Objectives and Requirements on The Platform

2.1 High-level Objectives

The main objectives of the VISION project, as per the ICT-48 call and the grant agreement, are to:

- Mobilise the European AI community;
- Strengthen the synergies between Europe's AI networks of excellence;
- Foster strong connections between academia and industry;
- Develop a European approach to AI skills education;
- Promote the EU as an attractive environment for AI research and researchers;
- Help the European AI community and the European Commission to develop a unified EU-AI brand that can be communicated consistently and transparently across Europe and worldwide.

Evidently, these goals cannot be achieved by VISION in isolation, but are to a large extent a community effort; VISION's role is to coordinate and support this effort. To help the community reach these and other goals aimed at ensuring the success of "AI made in Europe" in an effective and timely manner, VISION is preparing the launch of a moderated and effective communication tool for discussion and exchange across the four ICT-48 networks, AI4EU and other stakeholders.

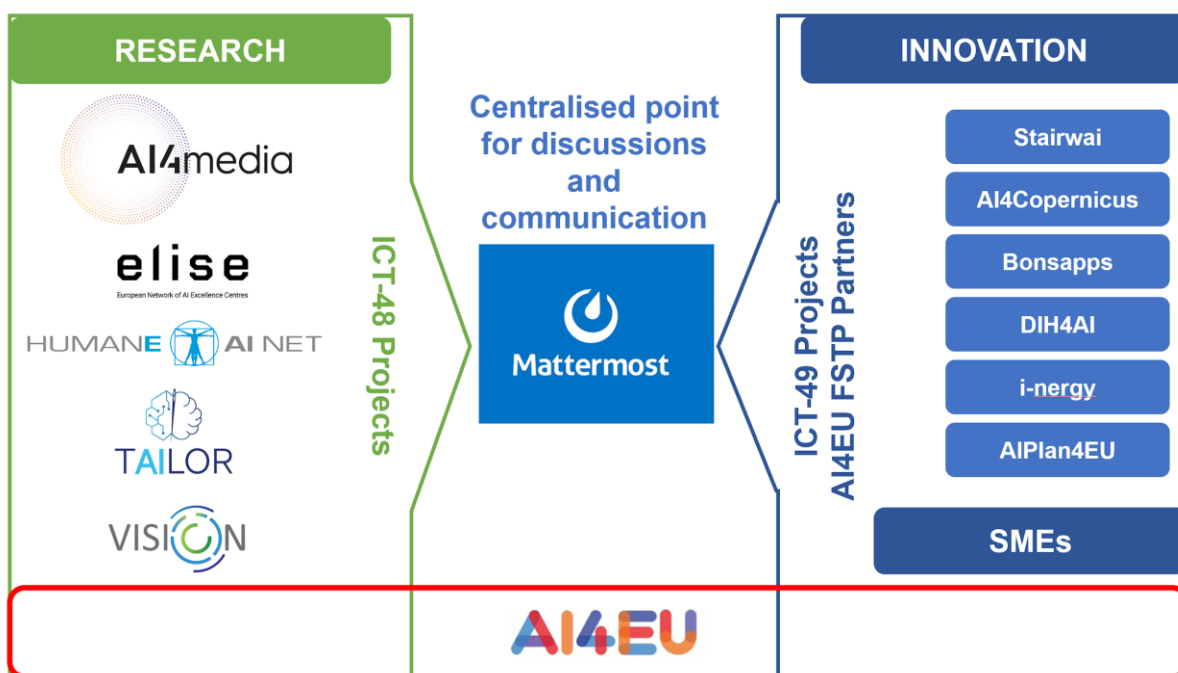
It is of key importance to foster strong interaction between the NoEs created through the RIA components of ICT-48. It is also important to create mechanisms to engage experts and institutions that are not directly involved in the current NoEs, since they form part of the critical mass in AI capabilities and talent that must be mobilised to maximally reinforce Europe's research capacity in AI and to ensure Europe's leadership in research topics of key strategic importance.



A communication tool for sharing research knowledge between ICT 48 and potentially beyond

Among the reasons that led us to decide on a centralised communication platform are the flexibility and scalability of the Mattermost installation that was ultimately chosen. The technical maturity and broad acceptance of this solution across Europe and beyond will support the desired accessibility and anticipated growth in users. This, in turn, will ensure that the AI community participating in ICT-48, in AI4EU and beyond will find it easy and convenient to make broad and effective use of the platform for sharing information and knowledge. The communication platform will thus serve a crucial need of the European AI Ecosystem and has the potential to play a major role in helping alleviate its current overly fragmented state.

The following figure illustrates how the communication platform will connect the ICT-48 Networks of Excellence and AI4EU research partners with the ICT-49 Innovation projects and AI4EU FSTP partners (notably, SMEs) and clearly illustrates the need for a flexible, scalable and broadly accepted solution.



Thus, the communications platform serves three main purposes:

- Facilitate communication within the ICT-48 projects, AI4EU and other projects/networks that are part of the European AI ecosystem, and thus help them to operate efficiently;
- Make it easy and convenient to communicate and exchange between these projects and networks;
- Create effective communication channels between the European AI research and AI innovation ecosystems, including companies of all sizes, as well as other societal stakeholders.

As the communication platform is used, the information that becomes available therein will also serve as an important repository and source of information. This, of course, requires carefully thought-out mechanisms for ensuring that information is only accessible to those who should have access to it.

2.2 Overall Requirements

From the high-level objectives outlined in Section 2.1 in conjunction with an emphasis on European technological sovereignty, a number of technical requirements can be derived:

- Open Source, DIY integration enabling complete control over data (e.g. messages, posts, etc.);
- Self-hosting, so that the platform can be completely hosted and operated within Europe;
- Support by a wide range of platforms and operating systems, to ensure broad use;
- Ease and convenience of use, via mature applications and interfaces;
- Security, privacy and transparency, including no third-party monitoring of messages sent via private or team/group conversations and clear delineations between public and private communication;
- Possibility of service integrations, via external APIs, to satisfy future needs of AI4EU, ICT-49 projects and similar stakeholders.

This leads to additional, concrete technical capabilities that are commonly found in communications platforms used in corporate, educational and other environments for similar purposes:

- Shared central workspace for discussions and exchange of files, data;
- Possibility for integration of productivity (and other) tools;
- Organised conversations at different levels - AI community at large, NoEs (separate teams), different public and private channels (within teams), one-on-one conversations;
- File, image, and link sharing;
- Real-time messaging, audio, video, and screen sharing;
- Searchable message history;
- Notification management;
- Tools for custom branding.

3. Analysis of Existing Solutions

An analysis of the available solutions has been conducted in cooperation with DFKI, taking into account all mainstream platforms. The data used in this analysis was initially addressed to CLAIRE in order to assess the efficiency of the currently used Zulip platform.

3.1 AI-on-demand Platform

As per the VISION project proposal and description of action, the AI4EU platform was considered to be used as the main communication tool, preferably in conjunction with existing CLAIRE's communications platform [Zulip](#). The AI4EU platform, European Union's landmark Artificial Intelligence project, represents a comprehensive multi-stakeholders platform spanning the EU, aiming to bridge gaps between research, innovation, development, and business. The AI4EU Platform has been created as an open and sustainable tool. Moreover, it enables bringing stakeholders together through virtual events.

The AI4EU platform functionalities have been assessed. It offers a wide range of functionalities in terms of community building that brings together all individuals and organisations interested in using or benefitting from AI capabilities. The AI4EU platform serves for dissemination on AI events and provides a comprehensive catalogue of AI tools, resources and AI experiments from the European AI community.

Especially, following functions for community building are available in the AI4EU platform:

- Build your network;
- Partner with organisations;
- Talk with AI experts;
- Collaborate on AI projects;
- Share to the Community.

Nevertheless, the following limitations have been identified:

- No possibility to invite or create users;
- No overview of members from different NoEs/organisations, only the entire community;
- No possibility to create streams for members of different NoEs/projects/communities;
- No branding possible for NoEs and other communities (CLAIRE, ELLIS).

For these reasons, the AI4EU platform was not mature enough for some of the functionalities required to be used as a tool for effective interactive communication among the NoEs.

3.2 Comparison of Platforms

Among the most popular team collaboration tools are listed platforms such as Slack, Microsoft Teams, Rocket.Chat, Mattermost, Zulip, Matrix, Discord, or Webex.

Considering a broad use by enterprises and non-profit organisations as well as maturity of the systems, [Zulip](#) and [Mattermost](#) platforms have been considered in further comparative analysis. Other solutions have been found to not satisfy several of the requirements from Section 2.2, namely the ability of being 100% hosted in Europe, providing complete control of data, ensuring high data security, technology flexibility, and thus keeping the autonomy of the European AI community.

A detailed comparison of the Zulip and Mattermost platforms has been conducted:

Specifications	Zulip	Mattermost
DIY integration	Yes	Yes
Hosting options	Hosted and Self-hosted	Self-hosted
License	Apache 2	MIT
Platforms	Web, iOS, Android, Windows, MacOS, Linux, terminal	Android, iOS, Windows, MacOS, Linux
Service integrations	Yes	Yes
Mac OS Client	Yes	Yes
iOS Client	Yes	Yes

Further technical comparison related to security:

Zulip	Mattermost
All Zulip authenticated API has a built-in rate that prevents DoS attacks	Internal data storage on MySQL and PostgreSQL, which means the database a user owns
TLS encryption	TLS encryption with 2048-bit RSA
Authentication over HTTPS	Multi-factor authentication
Single-sign-on	Single-sign-on
Configurable access control policies	Certificate-based authentication without and with SAML
Hosted behind a firewall (on-premise)	Secure installation in the user’s data centre with advanced security options
Admins can configure a user’s ability to edit or remove a sent text.	The operation behind the firewall
	No need to share Active Directory over the public network

In conclusion, Zulip and Mattermost both offer similar functions and the important ones are available on both platforms. Mattermost offers better branding opportunities (e.g. logos, colours, etc.).

Mattermost installation is not completely free, while Zulip is free under specific conditions for non-profit organisations only. Therefore, both options would be suitable depending on the preferences of the NoEs (see next section).

3.3 Consultations with ICT48-NoEs

A consultation with designated representatives of the four NoEs was executed in November 2020 to get feedback, support, and broad acceptance for this solution.

NoE	Feedback
AI4MEDIA	The Network is already using the trial version of Mattermost with no extra functionalities, would not like to change to another option.
ELISE	The Network has been asked and has not made the decision yet.
HumanE-AI-Net	Support the idea of using Mattermost, nevertheless they do not seem to be convinced the solution is needed.
TAILOR	Overall positive attitude to the Mattermost installation.

With this consultation, we concluded that there is general overall support of the Mattermost platform, as the main internal communication tool for the ICT-48 NoEs. Moreover, Mattermost has already been used and hosted at Inria, that is together with its 2 400 scientists present in various AI communities (among others in CLAIRE, BDVA, euRobotics, ELLIS).

3.4 Mattermost

According to multiple user reviews, Mattermost features the collaborative app looks and functions like Slack but has the enterprise power of Microsoft Teams - and the ability to run internal, on-premise server. Mattermost can run as a server console installed in a private data centre and run securely without cloud access over the public web - and still provide cloud access if desired.

Mattermost provides enterprise-grade collaboration solutions for organizations on a vibrant open source platform. Private, hybrid and public cloud solutions offer secure, configurable, highly scalable messaging across web, mobile and PC with archiving, search, and deep integration across in-house systems. Mattermost represents a multi-channel internal communication and collaboration platform that helps a large number of users to manage private/group chatting, share documents, videos/audio, or links and maintain contact directories.

Summary of main features

- Real-Time Messaging and data sharing through the DevOps Lifecycle;
- Discussion, bots, files, and tools together in a shared and central workspace;
- Have complete control over the data;
- No third-party monitoring of messages sent over;
- Easy-to-deploy solution for managing communication;
- Organized conversations in teams and channels;
- Fully searchable message history - Search and data archiving;
- Full text search;

- 1-on-1 and group messaging;
- File, image, and link sharing;
- Emoji and rich Markdown formatting;
- Multi-language support (15 languages);
- Tools for custom branding;
- Mattermost supports more than 600 integrations with plugins, extensions, bots, and other apps: Jenkins, GitLab, Amazon EC2, Microsoft Azure, or Google Compute Engine integrations.

Desktop support

- Native apps for MacOS, Windows, and Ubuntu Linux (and RHEL/CentOS 7+ unofficially);
- Web support for Firefox, Safari, Chrome, and Edge;
- Email support for Outlook, Apple Mail, and Thunderbird.

Mobile support

- Native apps available for Android and iOS;
- Push notification support;
- Web support for Chrome and Safari browser apps;
- Email support for iOS Mail and Gmail App.

Open Source

The Mattermost's open source nature offers three direct benefits over proprietary messaging platforms like Slack, Microsoft Teams, and Discord:

1. **No vendor lock-in:** With open source software, the code is available to everyone. Users, third-party vendors, and organizations have access to the code at all times, free of cost. Moreover, users get peace of mind with full control over their data, security, and infrastructure.
2. **Stronger security:** With a large community of developers, security flaws are detected, fixed, and communicated quickly to all users, often before a flaw ships in the product. As highlighted in Red Hat's report on The State of Enterprise Open Source, high-quality software and better security are top benefits of enterprise open source software.
3. **Community-powered:** A growing community accelerates innovation by collaborating on problems, finding solutions, and creating new use cases, all leading to rapid feature development not possible with proprietary solutions. A thriving community is a force-multiplier for open source projects.

Conclusion

The tangible product is represented by the Mattermost installation itself, a portal to make use of the information and knowledge created by the AI community involved in various projects and providing a wide range of services. The Mattermost platform will therefore provide a space for best practice sharing and mutual interactions and discussions within ICT-48 NoEs, cross-network communication and dissemination among them, and further encourage communication and community creation among yet still fragmented European AI communities.

In time of preparation of this document, the AI4EU has been offered the possibility to get its own space within Mattermost installation as the main non-ICT-48 community, yet the consortium has not decided before submitting this deliverable. The ambition of this effort is to create a communication platform for the entire ecosystem. Further discussions with other initiatives, networks and H2020 projects will follow.

4. Description of the Technical Solution and Processes

Role of Inria

For the final decision on the Mattermost platform, the engagement of Inria was crucial. As coordinator of the R&I aspect of the French national AI strategy, efficient collaboration and communication within the European AI communities is essential. For that reason, Inria institutionally supports CLAIRE, and through the implication of numerous Inria researchers it upholds strong relations with the ELLIS network as well. To help stimulate convergence between the European AI communities, it was decided by the Inria direction to seize the opportunity that presented itself in the VISION CSA project to enlarge the scope of the engagement with CLAIRE and to host a Mattermost instance to support and benefit the ICT-48 NoEs and the European AI R&I ecosystem as a whole as well.

Inria plays a leading role within its multiple involvement in European AI community, in particular in the CLAIRE network where it is also represented in the extended leadership team. Inria provides strong institutional support for CLAIRE and is maintaining the interlinks and cooperation with other AI initiatives, namely ELLIS. Inria as one of the most prominent national research institutions with over 50-year history and leading role of AI research can create continuity and sustainability of having the selected communication tool under one umbrella - both in terms of technical and operational levels. Moreover, Inria's strict privacy policy and data security compliant with European regulatory framework are a solid base for confidentiality of wide user groups.

Mattermost installation at Inria

The Mattermost installation is hosted and supported by the Inria technical services on the Inria headquarter premises in Rocquencourt France. At the time of writing this deliverable, the legal framework is being finalised. It will be added as Annex to this document once completed. Additionally, an amendment to the Grant Agreement and Consortium Agreement are in preparation.

Server name

The server name, "**VISION4AI**", corresponds with the domain name vision4ai.eu, the corresponding urls will be talk.vision4ai.eu and mattermost.inria.fr.

The DNS setting is coordinated between CIIRC CTU IT department as the domain administrator and Inria, the host of Mattermost installation as well as the security certificates and their updates.

Testing phase

During the first two weeks of February, an intensive testing of the installation has been conducted jointly by Inria and CIIRC CTU, to ensure a deep understanding of the features provided, how these may be used by the NoEs and managed by the system administrators at Inria and CIIRC CTU.

The testing phase focused on issues regarding privacy and confidentiality and user management and experience, and resulted in the following lessons learned:

- No private channels/conversations can be accessed by a system administrator;
- Users can send and receive direct messages across different teams;
- Teams created by system administrators, public channels by team administrators, private channels;

- Notifications management can only be done at a channel level by the channel administrator, not by just any user in that channel. A user can change the settings at his/her personal level;
- It is possible to leave the overarching team for the AI community at large, whilst staying a member of other teams;
- The rights of users should be restricted so they cannot deliberately exclude another user, ensuring that no one, except the team administrator, should be able to exclude users from a team or public channel;
- A brief User manual and FAQs should be created and distributed to administrators (and possibly users) to create an optimal user experience and avoid misunderstandings, as well as a “train the trainer” session to be organised for NoEs team administrators.

Current Status of the Mattermost Installation

The Mattermost platform was installed and launched after a comprehensive testing phase. Launching the platform means that all technical requirements were met, servers were tested and are ready. In next, the VISION CSA members will start using the platform in the first half of March 2021. The factual use of the platform by the ICT-48 NoEs will be implemented in the second half of March 2021 - see Chapter 8.

5. Data Security, Privacy and Confidentiality

Governance

Inria's Information Systems Directorate will be the infrastructure administrator. The governance of the Mattermost instance will also be composed of four system administrators, two from Inria and two from CIIRC CTU. The systems admins have limited access to the parameters of the platform and can access all teams and public channels. They can't access private channels or private messages.

Data confidentiality

System admins cannot access private messages and private channels. To ensure data privacy and confidentiality is respected, two team admins will be selected for each team. These team admins will have to be identified by the concerned NoE or entity for which the team is created. The team admins will be in charge of creating and moderating the channels within the teams, as well as managing the users within the teams (will have the power to exclude somebody).

The system admins will not access those teams, except if requested by the team admins to resolve specific issues. The system admins do have access to site and team statistics. In respect to the content of the different teams the NoEs will create, the system admins agree to sign a code of conduct guaranteeing that they will not go on these teams unless explicitly requested by the team administrators. If they need to access this content, the system administrators agree to maintain the confidentiality of the private information they may be asked to access, and shall not use, disclose, furnish or make accessible such information to anyone other than authorised members.

The infrastructure administrator will only intervene if there is a major technical issue that cannot be resolved by the system administrators. Infrastructure administrators are employees of Inria's Information Systems Directorate and are bound by a code of conduct to respect and will not access private information unless being explicitly asked to do so. The infrastructure administrator agrees to maintain the confidentiality of the private information he may be asked to access, and shall not use, disclose, furnish or make accessible such information to anyone other than authorised members. He also agrees to establish and maintain administrative and technical safeguards to protect the security, confidentiality, and integrity of the information.

Data security

The Mattermost installation is hosted and supported by the Inria technical services on the Inria headquarter premises in Rocquencourt France. GDPR and security requirements are put in place and correspond to the services already being provided to Inria's employees and partners. At the time of writing this deliverable, the legal framework is being finalised. It will be added as Annex to this document once completed.

For privacy purposes, the emails of all users will be hidden, only names will be visible to ensure users take responsibility for the content they post on the platform.

A page will be set up on the VISION website (eventually with a direct link to Inria's website) where all relevant information in respect to data security and GDPR regulations will be clearly stated. A link toward this page will be integrated in the Mattermost instance and will be accessible by all its members. The code of conduct of the system administrators will also be made available on this page.

6. User Management

Types of Users

There are four types of user roles with different permission levels in Mattermost - System Admins, Team Admins, Members, and Inactive accounts (not relevant):

- **System Admins:** The System Admin is typically a member of the IT staff and has all the privileges of a Team Admin, and is able to do and access the following:
 - System Console from the main menu in any team site
 - Change any setting on the Mattermost server available in the System Console that has not been locked by the infrastructure administrator
 - Promote and demote other users to and from the System Admin role
 - Deactivate user accounts and to reactivate them
 - Private channels, but only if given the link to the private channel
- **Team Admins:** On creation of the team, the person who set it up is usually made a Team Administrator. In case of ICT48, the teams will be created by System Admins and the role of the Team Admins will be assigned to designated representatives of the ICT48-NoEs (see further). A person can be a Team Admin for one team but only a Member on another team. Team Administrators have access and are able to do the following:
 - “Team Settings” menu from the team site main menu
 - Change the name of the team
 - “Manage Members” menu, where they can control whether team members are “Members” or “Team Administrators”
- **Members:** When a new user joins a team, this is the default role given to them. Members are given the basic permissions on the Mattermost team.

Admin roles, duties and responsibilities

The main role is attributed to system administrators: System admins can use the command line to assign roles that permit members to have admin access to specified areas of the “System Console”. This allows specific members of the VISION project organisation to perform certain administrative tasks without providing them with access to all system administrative capabilities.

System admins can also use the System Console to manage additional system admin roles and privileges.

A system admin can see all the teams and their content, except for private channels and messages. A system admin can exclude members of a team if needed.

Team administrator is at a slightly lower level of responsibilities: Once a team is created by the system admin, the team administrators are able to manage the members in it despite not being an admin and can also create channels. It will be the responsibility of the team administrators to manage the membership (i.e. invite and exclude members if needed) and ensure that the right people are in the team, as any member of the team can invite new members to the team (everyone is able to share links).

Member (user) is at the lowest level of responsibilities: a member can only join a team if he/she is invited to do so. A member is not allowed to create a new team or to exclude any members of the team. However, a member can create new channels, see other members of the teams he/she is part of and can add existing members of a team to a channel within that team. A member is not allowed to see teams, or other members of those teams, that he/she is not a member of. A member can switch between teams he/she joined using the team sidebar that appears on the left-hand sidebar.

To view a list of users on the team and what their roles are, Team Administrators can go to the Main Menu and select Manage Members.

Organising Conversations through Channels

Keeping information and messages organized in channels creates an efficient workplace. Channels are used to organize conversations across different topics. There are three types of channels:

- **Public Channels** are open to everyone on a team. By default, new team members are automatically added to two Public Channels when they sign up: Mattermost help and Off-Topic.
- **Private Channels** are for sensitive topics and are only visible to selected team members. Any member of a Private Channel can add additional members. Channel members can choose to leave at any time, but only the channel owner or Team Admin can remove other members. A public channel can be turned into a private channel but this cannot be done reversely - a private channel always remains as private.
- **Direct Messages** are for conversations between two people - private conversation with one other person. Group Messages are Direct Messages that have conversations among three or more people. Both are visible only to the people involved. If the system admin has allowed it, direct messages or group messages with people on other teams can be conducted.

Mentioning teammates: It is possible to notify the teammates when they are needed by typing @ to bring up a list of team members who can be mentioned. To filter the list, the first few letters of any username, first name, last name, or nickname shall be typed. When selected (by pressing Enter), the username replaces the full name or nickname. A special mention notification (email alert) will be sent to the person mentioned in the message. It is also possible to mention an entire channel by typing @channel or @all. All members of the channel receive a mention notification.

- *The channels appear in alphabetical order, otherwise an experimental feature would have to be implemented - therefore, numbering is recommended (and also used in the general team) to sort the channels.*

Invitation to the Platform

To be able to join the teams created in Mattermost for VISION and the 4 ICT-48 NoEs, potential users need to receive a link. He/she will then have to create an account by setting up a username and a password. Usernames have to begin with a lowercase letter and be 3-22 characters long. It is allowed to use lowercase letters, numbers, periods, dashes, and underscores. Mattermost also requires email verification after account creation prior to allowing login (max login attempts = 10).

All users will become members of the **“VISION4AI” Team**. This team will be the common space to share information, communication materials, etc. Users can decide to leave this common team while remaining in the other teams. This doesn't impact the possibility to write direct (private) messages to anybody. There is no permeability between the teams, thus users will need to be added to the different teams they might be interested in.

Each of the networks has its own responsibility for its own space (i.e. Team) - they can create the whole structure of public and private channels. VISION ICT-48 Project has the responsibility also for the cross-network channels, the initial channels structure can be found below.

A page will be set up on the VISION website/on Inria's website (to be defined) where all relevant information in respect on how to use the tool (code of conduct) will be clearly stated. A link toward this page will be integrated in the Mattermost instance and will be accessible by all its members.

Removing a User from Team

Any Team Administrator has the ability to remove a user from a team by going to the Main Menu > Manage Members, and selecting Remove From Team in the dropdown menu beside a user entry.

When a user is removed from a team, the team will no longer show up in their team sidebar. If they currently have the team open, they are redirected to the first team that appears on their team sidebar. If they didn't belong to any other teams, the user is sent to the team selection page.

A System Administrator can also remove users from teams by going to System Console > Users, and selecting the dropdown beside a user entry and clicking Manage Teams.

Leaving a Team

Users can also choose to remove themselves from a team, by going to the Main Menu > Leave Team. This will remove the user from the team, and from all public channels and private channels on the team.

They will only be able to rejoin the team if it is set to “Allow any user with an account on this server to join this team” team, or if they receive a new invite. If they do re-join, they will no longer be a part of their old channels.

Useful Mattermost links:

Complete Mattermost documentation: <https://docs.mattermost.com>

Mattermost User's Guide: <https://docs.mattermost.com/guides/user.html>

7. Proposed Structure of the Mattermost Installation

Teams

When launching the platform, the whole community will be invited in one common team:

“VISION4AI” = European AI community - by default, all members will have access to public channels - see list below

Following teams will be initially created (in initial phase titled “Project name + ICT48”), all also marked with their logos:

- **VISION4AI** for the European AI community at large;
- **VISION ICT48** - access to public channels: VISION members;
- **AI4Media ICT48** - access to public channels: AI4Media members;
- **ELISE ICT48** - access to public channels: ELISE members;
- **H-AI-Net ICT48** - access to public channels: Human-AI-Net members (the name of the channel to be approved by the consortium);
- **TAILOR ICT48** - access to public channels: TAILOR members.

As mentioned above, the channel structure within particular teams will be up to the team admins except for the public channels of the VISION4AI Team, that will be initially set at this way:

Public channels of the VISION4AI Team

1. Mattermost Help (*this channel remains in every team*)
2. News
3. Events
4. ICT-48 Cross-Network*
5. AI for Good (e.g. Covid-19 Response)
6. Best Practices
7. Industry & Innovation
8. AIDA - Doctoral Programme
9. Mobility Programmes
10. Regulation & Standards
11. Ethics
12. Other topics

* *This channel might be switched into a private channel once the platform will be joined by other initiatives and projects.*

The above-mentioned channels represent a starting frame for communication among the AI community. It will be continuously assessed in order for the structure to correspond to the needs of the community. E.g. research areas such as ML, DL, CV, Big Data, Robotics, HRC etc. might get a specific channel for specific discussion in the future too. Currently, the procedure for evaluating proposals for and establishing of new public channels in the VISION4AI team is in the preparation and will be circulated among the ICT-48 NoEs for comments before its launch.

All users are allowed to post to every public channel. The team and system administrators reserve a right to remove content in case the code of conduct is not respected.

Channels structure for ICT48 VISION Team

Public:

1. WP1 Management
2. WP2 Mobilizing
3. WP3 FSTP
4. WP4 Academia-Industry
5. WP5 Skills & Education
6. WP6 Communication
7. Coordination
8. Mattermost help
9. Other topics

8. Launch of the Platform and Next Steps

In February 2021, the technical requirements were met and servers were put into operation. The factual onboarding of users to the communication platform will be processed during March 2021 within the ICT-48 Networks. Currently, the system settings have been made, including the creation of the general VISION4AI team for the whole community and individual teams for each of the ICT-48 NoEs. On top of that, the public channels within the VISION4AI team are being created too with the remark that the viability and practical use of these channels will be subject for further evaluation. For the VISION ICT48 team, the public channels will be created as well.

All users will have access to the contextual information on the whole Mattermost installation, including Inria's role in this task and links to the main documents such as codes of conduct for both users and administrators, data privacy statements and GDPR compliance. For this purpose, all available tools will be assessed for use, especially the welcome page in the Mattermost, VISION website (www.vision4ai.eu) and Inria's website. The code of the conduct for team administrators and users will be subject to regular revision and modification as needed - these documents will be online living documents.

The ICT-48 coordinators will get the information on the Mattermost installation at the beginning of March with description of steps that shall follow. They will be asked to nominate two representatives of their networks that will become the role of team administrators. For this group of main contact persons, a specialized hand-on training workshop will be organized soon. After that, a broad communication to the ICT-48 users will be carried out to finalize the onboarding process as soon as possible, preferably before April 2021. In parallel, the onboarding of the VISION consortium team will be processed and while using the Mattermost, an ongoing feedback for technical and user adjustments will be promoted.

In three months after the completion of the onboarding process, a broad survey among ICT-48 NoEs will be conducted to get feedback on the user experience of the platform and also to share best practices.

9. Conclusion

This document has described the process that led to the establishing of a joint communication platform for facilitation of the communication within as well as between the ICT-48 networks with the potential use beyond the ICT-48. The document has proposed an initial structure and overall settings of the platform that will be provided through the Mattermost installation by Inria.

The ambitious objective going beyond the scope of this deliverable is to create a communication platform that will be broadly accepted and used by the European AI community at large, especially the other ICT H2020 projects, namely the ICT-38, ICT-49, as well as major European AI initiatives. This also implies the opportunity to invite the European innovation community (e.g. SMEs) linked to the AI research community as envisaged in the ICT-49 activities. Eventual further steps and extensions must be discussed first with the representatives of EC. The aim of this tool is not to communicate AI in Europe, but to create a room for open communication within the AI community. Further use of this tool will depend on discussions and negotiations with respect to resources and maintainability perspective. Crucial role will be given to the AI-on-demand platform in this effort as well to disseminate these opportunities to the research community.